THE LANCET.

VOL. I.] LONDON, SATURDAY, OCTOBER 22, 1842. [1842-43.

COURSE OF LECTURES
ON
DISEASES OF THE SKIN;
THEIR
HISTORY, PATHOLOGY, AND TREATMENT.

Delivered in the Middlesex Hospital, during the Summer Session, 1842,

BY

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LECTURE I.

GENTLEMEN,

WHETHER we regard diseases of the skin in reference to their history, whether in relation to their importance as affecting the appearance and comfort of the body, or their value as indications of constitutional disorder, they offer to us not only a most interesting but a most extensive field for observation.

The history of diseases of the skin carries us back to the earliest days of antiquity; these diseases had attracted the attention, the close observation and study of our ancestors. This may be easily conceived when we reflect on the exposed situation which they occupy; their remarkable appearances; their occasional association with other and more serious disease; their frequent dependence on constitutional causes; their epidemic peculiarities; their correspondence in certain instances with the critical period of fevers; in others their harmless nature, and in others again their seriously destructive effects. In evidence of the careful observation which diseases of the skin received at the hands of ancient medical philosophers, may be adduced the excellent and precise descriptions of their characters which are met with in their writings.

When Willan first undertook to clear diseases of the skin from the obscurity which hung about them at the commencement of his labours, he quickly discovered the necessity of tracing to their sources the designations and corresponding descriptions of these diseases. The same process had been pursued by his predecessors, but as each dermatologist assigned to the description before him the kind of disease with which he was most familiar, confusion instead of advantage resulted from their exertions. The result was different in the hands of Willan, aided by a sound classification, he was enabled to fix in unalterable characters the name of the disease, with its concurrent description, after he had diligently explored the writings of the ancient philosophers. The stability of Willan's views was at once seen, and as naturally admitted by the profession; and they have become as they merited, the standard system of the world. But even the learning which Willan and his successor, Bateman, have brought to bear on the determination and classification of cutaneous diseases, have been insufficient for the purpose of freeing it entirely from objection in this respect. I may adduce as an instance of this failure the term *herpes*, derived from ἑρπειν, to creep, by which we signify a cutaneous disorder characterised by an eruption of vesicles; these vesicles being in the first instance filled with serum, and subsequently with sero-purulent contents. But herpes offers no disposition to creep, to spread from one spot to another until it overruns a surface of considerable extent, as we should infer from its derivative alone, it bursts forth in the manner of an acute disease, as in the well-known instance of shingles, runs quickly and regularly through its course, and disappears without having changed the seat of its first development. This incongruity between the term and the disease to be defined was felt by Alibert, who consequently applied the designation to a chronic disease, slow in its course, commencing in a small spot, and increasing by extention, until it covers a surface of considerable extent. The herpes of Alibert includes the three squamous diseases of Willan, namely, lepra, psoriasis, and pityriasis.

The preceding is not a solitary instance of difference of opinion among modern dermatologists, and it may easily be conceived that if such difference exist now, the state in

which Willan found cutaneous pathology must have been truly perplexing. Indeed, were it not for the reason that I have already advanced, namely, the universality of Willan's nomenclature, and the entire disuse of that of Alibert, it would be necessary to go back again to the ancient records of medicine in order to decide between two contending authorities of such eminence.

The early reformers of dermatology were men of considerable learning, as, indeed, was necessary to enable them to measure strength with the princes of medicine, their predecessors; they accordingly display great depth of information in their writings, and their works are preceded by a somewhat copious review of the early rise and progress of cutaneous pathology. The history of cutaneous diseases naturally offers so many points of interest to the disciple of medicine, that I am tempted to crave your attention while I take a brief sketch of the history of dermatology and its cultivators.

The book of all learning of the early ages of the world, the Bible, contains many allusions to cutaneous disorders, and the instructions of Moses and Aaron, communicated to the priests, relatively to the diagnosis and treatment of certain diseases of the skin included under the general term leprosy, are deserving of the most attentive perusal. These instructions prove a very considerable acquaintance with medical knowledge, and serve as collateral testimony of the well-known fact, that the priests in ancient times exercised the double calling of moral preceptors and of physicians. I am induced to lay some stress upon this assertion, from perceiving that Henry and Scott in their Commentary on the Bible fall into error with regard to their explanation of the priestly treatment of this disease. "The plague of leprosy," they observe, "was rather an uncleanness than a disease; or, at least, so the law considered it; and therefore employed not the physicians but the priests about it." But the priest and the physician were one; that there may have been inferior practitioners of medicine is undeniable, but these were limited in their practice to the carrying out of the intentions of the priests.

Hippocrates, who occupies so prominent a place among ancient physicians, paid much attention to the skin and its functions in their relation to disease. He was the inventor of the medical theory of the four elements and four temperaments, and the father of humoral pathology. Being a strict observer of nature, and an industrious preserver of cases, Hippocrates perceived the favourable results of critical discharges from the mucous membranes and skin, and these he endeavoured to excite, with the view of checking the progress of disease. He attributes certain cutaneous eruptions, such as the squamous diseases and scabies, to predominance of lymph; and he draws a faithful picture of impetigo in describing the yellowish, dried-honey-like scabs which are sometimes found in patches on the skin. Hippocrates, moreover, arranged diseases of the skin into two groups, according to the nature of their cause; in one of these he conceived the disorder to originate in the tissues of the skin, being uninfluenced in its development by the state of the constitution; the other group he regarded as the consequence of a determination, an *apostasis* of a constitutional disorder upon the skin.

To Aretæus we are indebted for the first account of the elephantiasis of the Greeks, a disease which originated like the leprosy of scriptural times in Egypt, and thence became propagated through Europe, taking a share in the scourge of leprosy of the middle ages.

Celsus makes frequent allusion to cutaneous diseases, and some of these he describes with sufficient accuracy to enable us to discover their identity with existing disorders. But in his writings, as in those of his predecessors, there still reigns the difficulty of conciliating the name assigned to the disease with the nomenclature at present in use. From this author we derive the term *ignis sacer*, applied to erysipelas; *sycosis* used in reference to a disease of the chin; and *porrigo*, a disorder of the scalp. Celsus also speaks of impetigo, papulæ, lentigo, ephelis, alopecia, ophiasis, &c.; but these terms have frequently, with him, a different meaning to that which we regard as established at the present day. For instance, under the designation papulæ he describes lepra, and among his impetigines he includes eczema.

Pliny, though a mere historian of medicine, mentions several names of cutaneous diseases which are not to be met with in Celsus. Following the impulse of the times, he has accumulated a large collection of remedies, and among them are some still employed for the diseases in which he recommended them. I may instance vinegar as a local application in prurigo, and baths of mineral waters. In Pliny, also, we find the first suggestion for the internal administration of cantharides; he directs our attention to zona, to prurigo senilis, prurigo pudendi, and to the scaly patches occurring upon the face, which we term pityriasis. In the works of Pliny, again, a graphic description of a contagious mentagra, which prevailed in Italy during the reign of Claudius, is recorded.

Galen added much by his labours to our knowledge of diseases of the skin; he was the founder of a topographical classification, dividing these diseases according to their seat upon the head or upon the body at large. This arrangement led him to a more precise diagnosis of the two groups of diseases than had previously existed. The causes of cutaneous diseases he referred to

his favourite doctrine, the humoral pathology, and his treatment was determined by the same views.

Oribasius, Ætius Amidenus, Alexander Trallianus, and Paulus Ægineta, disciples and successors of Galen, have done little more than transcribe the works of their master, and carry out his views. With the exception of Alexander Trallianus and Paulus, they have contributed almost nothing to the diagnosis and pathology of cutaneous diseases; but the former writer devotes three chapters to the distinct consideration of porrigo, achor, and favus, and the latter distinguishes between lepra and psoriasis. The works of the authors under examination are crowded with prescriptions, to the accumulation of which much of their attention appears to have been directed.

The Arabians, by their conquest of the Roman Empire in the East, infused new vigour into the study of medicine. Since the time of Galen the Greek school had been gradually on the decline, and may be regarded as having terminated in the seventh century in the ashes of the Alexandrian Library. The Saracens introduced to us several diseases with which we had been previously unacquainted, and were the cause of their diffusion through Europe.

Ahrun, a priest of Alexandria, and the earliest medical writer of the Saracenic school, gives the first account of small-pox, in a work published in the sixth century, and termed "Pandects." His successor, Serapion, has left some well-digested remarks on diseases of the skin, and the treatment which he recommends is, for the most part, apt and judicious. But Alkhendi, a follower of Serapion, appears to have been too much engrossed with the study of astrology, and by the application of geometry and music to medicine to have contributed to the improvement of our knowledge of disease.

Rhazes, an Arabian physician of the ninth century, attained great eminence for his knowledge and industry. He has left a very correct and elaborate description of variola and rubeola, of which he traces the symptoms very accurately, and enters into some curious speculations with regard to the nature and cause of these diseases. His treatment savours of the improved therapeutic knowledge of his times, and the resources of chemistry, which had been especially cultivated by the Arabians, are made available in the treatment of disease.

Ali-Abbas, who obtained the designation of "the magician," a title sufficiently indicative of the nature of the studies of the times in which he lived, and of the existing state of medicine, is distinguished among his contemporaries for the clearness and originality of his writings. In the latter much of the learning of his predecessors is preserved, and he has contributed considerably to our knowledge by his individual labours.

Avicenna, the successor of Ali-Abbas, is celebrated rather for the diligent spirit which he displayed as a compiler, than for any originality in his writings. He was well grounded in philosophy previously to commencing the study of medicine, and in the latter science showed himself to be a warm admirer of Galen. He treats especially of scabies and pruritus, and assigns to lepra and psoriasis the term *formica*, on account of the tickling sensation which attends their development.

Avenzoar, a Spaniard by birth, though of Saracenic origin, exhibits much originality in his writings, and is a worthy representative of the Arabian school. For his knowledge of scabies and its treatment, he receives the commendation of Moufet, who regards him as the only physician among the ancients who was thoroughly acquainted with this disease. He was aware, also, of the existence of the itch-animalcule, concerning which he remarks—"Syrones Assoalat et Assoab dicti, sunt pedicelli subter manuum crurumque et pedum cutem serpentes et pustulas ibidem excitantes aquâ plenas: tam parva animalcula, ut vix visu perspicaci discerni valeant."

With the pupil of Avenzoar, Averroes, the Saracenic school of medicine terminated towards the end of the twelfth century.

This school is remarkable for transmitting to us the first accounts of small-pox and measles, of both of which diseases the most ample history is contained in the writings of Rhazes, and the form of elephantiasis named after them elephantiasis Arabum. Small-pox had committed serious ravages among the besieging army at the siege of Mecca, in the middle of the eighth century, and an account of this epidemic had been handed down to his successors by Ahrun. The Arabian school, moreover, is deserving of our gratitude for the careful preservation, during the dark ages, of the relics of the Greek philosophers, saved from the destruction of the Alexandrian Library; and to it we are indebted for many new medicines, both of simple origin and chemical compounds.

We now approach the period of the celebrated epidemic of the middle ages—leprosy; a disease which would seem to have taken its origin in Egypt and Palestine, and to have been transmitted to Europe by means of the Crusades. Under the general designation leprosy, all cutaneous diseases of severity were included, and the lazarettos for the care and cure of the afflicted became disseminated throughout Europe in surprising numbers. We learn that in Christendom there were no less than 19,000 of these establishments, and in France alone there were 2000. Besides the confusion that attended cutaneous disorders at this period, several different species of disease were admitted by the physicians of the period under the

generic title lepra; the principal of these being the elephantiasis Græcorum, a tubercular disease of the skin, and the elephantiasis Arabum, a disease of the cellular tissue, attended with thickening and infiltration, and corresponding with our Barbadoes leg. Both of these diseases resembled each other in the deficient sensibility of the skin, the anæsthesia which accompanied their progress. I am speaking now only of the epidemic of leprosy that reigned at this period; it must not be supposed that the disease had been previously unknown, for we find it to have been the subject of legislation so early as the eighth century in France, and to have been regarded of sufficient importance to determine a legal separation between a man and his wife.

One of the earliest historians of the epidemic of leprosy was Gilbert, surnamed Anglicanus, from being a native of Britain. His "Laurea Anglicana seu Compendium totius Medicinæ" was published in the fifteenth century, and shortly after was succeeded by a work embracing the consideration of another scourge of the same period, lues venerea, by Theodoricus.

Beyond the description of leprosy, the middle ages contributed nothing to the advancement of cutaneous medicine. The principal writers were admirers of Galen, and followers of his philosophy. The names of Actuarius, of the alchemists of the thirteenth century, with Albertus Magnus, Roger Bacon, and Basil Valentine at their head, of Guillaume de Salicet, and of John of Gaddesden, may be passed over without remark. Guy de Chauliac probably deserves to be rescued from this neglect in consequence of the originality of his remarks on the contagion of scabies, and for his adoption of a classification of tineæ into five species. It may be proper to mention that the term *tinea*, among the older writers, was a generic appellation for all diseases of the head, however different in their nature; and the five species referred to under this name by the writer in question, correspond with the impetigo, eczema, sycosis, and favus of the present day.

The close of the fifteenth century is rendered remarkable by the outbreak of an epidemic disease, which, originating in Britain, spread through a considerable part of Europe, tracing its course by devastation and death. This fatal disease was the sweating sickness, or sudor Anglicanus; it prevailed in Britain during the years 1485, 1506, 1507, and 1588, and its history has been recorded by Dr. Caius. Since the time of Sydenham the sweating sickness has not been seen in this country, but still continues to show itself from time to time in France. During the summer of the present year, at the conclusion of the epidemic of typhus which visited Paris, three cases of sudatoria were observed in the Hôtel Dieu, in the service of M. Honoré, and have been placed on record by M. Marrotte. The disease is so rare, that M. Honoré had never seen an instance before, and M. Rayer, who is familiar with it, had never seen a case in Paris.

This period is also conspicuous for the prevalence throughout the south of Europe of syphilitic eruptions on the skin. This form of syphilis was first observed in Italy, and gradually spread towards the north and west; it became the subject of discussion among the writers of the time,—a consideration that seemed due to its importance and the ravages which it produced on those who were the subjects of its violence. The history of this epidemic may be found in the writings of Theodoricus, Torella, Manardus, Massa, Frascatorius, and Leonicenus.

During the sixteenth century the study of diseases of the skin made considerable progress, they were more attentively studied than hitherto, and the necessity of classification became still more obvious than heretofore. During this period we find many distinguished names associated with these diseases; as, for example, Tagault and Fernel, in France; Sennertus, in Germany; Forestus, in Holland; and Frascatorius and Jerome Mercurialis, in Italy.

Sennertus directed his attention to disorders of the sudoriparous and chromatogenous functions of the skin; and gives an elaborate account of plica polonica, and of the diseases of the hair follicles.

Frascatorius engaged in an inquiry into the contagious nature of certain diseases, and endeavoured to decide those which might truly be regarded as of that nature.

Mercurialis has collected all the information on diseases of the skin known to his predecessors. He pursues the arrangement of Galen into those which affect the head, and those which are distributed upon the rest of the body, and consecrates separate chapters to different diseases. The principal affections treated of by this author are exanthemata, pruritus, scabies, impetigo, lepra, tenia, &c.

Diseases of the skin came now to be more particularly distinguished from affections of the rest of the system. The numbers of those who are signalised as devoting their attention especially to this department were necessarily limited, but the results of their labours were more valuable and imposing. Among the celebrated names of the seventeenth century, in relation to diseases of the skin, are Riolanus, Hafenreffer, Schenkius, Bonetus, and in our own country, Willis. The work of Willis is introduced by a description of the structure of the skin, and then proceeds to a classification of its diseases into such as are attended "cum, vel sine tumore." Riolanus suggested an arrangement of diseases of the skin that may be regarded as the first rude sketch of the classification of Willan. Hafenreffer has

paid especial attention to syphilitic eruptions, and to the animal parasites of the human body, and has attempted a concordance of synonyms. The work of Schenkius is remarkable rather for the great number of singular cases which are assembled together, than for originality in plan or for practical considerations. We find in this collection several instances of alteration in the colour of the hair, of corneous growths, and of diseases of the scalp. Bonetus, again, derives his fame from the number and singularity of the cases which he has collected. These collections are frequently found of service as a source of reference when we chance to meet with extraordinary cases.

Imbued with the spirit of observation, and storing together of cases, derived from Hippocrates, many authors have devoted their labours to the collection of cases which seemed to carry with them a more than ordinary degree of interest, from their novelty or severity. The same procedure has been adopted where the method of treatment was unusual. Among these collections are the works of Riverius, Severinus, Lusitanus, Stalpartus, Platerus, Borellus, and Hagedorn. Riverius, in his work published in 1645, remarks upon the beneficial employment of the white precipitate in the form of ointment in the treatment of eczema, a remedy that is much lauded at the present hour by Velpeau, in the same disease, as a siccative and incarnative. In the work of Stalpartus a case of icthyosis is recorded, and is illustrated by a figure.

Sydenham, the English Hippocrates, flourished during the latter part of the seventeenth century, and the works of this eminent man and excellent practitioner, contain a store of valuable information on the epidemic diseases of the skin.

The medical records of the eighteenth century are enriched in this department by the names of Lorry and Sauvages, in France; of Plenck and Peter Franck, in Germany; and of Turner, Morton, Huxham, Jackson, and Willan, in England.

The work of Lorry is distinguished by the philosophic spirit of generalisation which he employs in the consideration of the etiology and treatment of diseases of the skin. His aim is chiefly directed to the establishment of principles, while he pays less regard to the description of particular diseases. He disregards, moreover, the advantages which naturally result from classification, and gives reason for the imputation commonly made against him of want of arrangement and confusion.

Sauvages has left behind some useful definitions of diseases, a subject to which he principally gave his study. His diagnosis is for the most part accurate, and he has pointed out a number of separate species.

Plenck is celebrated for his extensive classification of cutaneous affections; he establishes no less than fourteen orders of diseases; and this extensive division served as the source from which Willan derived the idea of his admirable system.

The work of Turner is remarkable for its practical tendency and style. The author excuses himself in late editions for retaining any part of the physiological and speculative matter which it contains, and suggests the greater limitation of his formulæ. While contemplating this pruning he was happily differently advised by his friends, and has left us a very valuable work, abounding in cases, and abounding also in formulæ, which, though somewhat antique in their fashion, really contain many important and excellent remedies. It will be recollected that it is to Turner that we owe a very useful topical application, the ceratum calaminæ, or Turner's cerate, as it is popularly termed. And it is further deserving of mention, that among the remedies newly essayed in cutaneous diseases by Gibert, and forming the subject of his introductory discourse at the early part of the present year, is *calamine ointment*.

The name of Willan is so closely associated with the state of medicine in the present century, as to form a necessary introduction to the names of Alibert, Bateman, and Biett. Other authors on diseases of the skin whose writings are connected with the past, are Derien, Chiarurgi, Joseph Franck, John Wilson, Plumbe, and Wallace. The consideration of the merits of these dermatologists comprises the history of classification of cutaneous pathology, and must consequently be reserved for separate dissertation. The subject of classification will constitute the matter of my second lecture.

AMPUTATION BELOW THE KNEE.

To the Editor of THE LANCET.

SIR,—Your Journal of the 8th instant contains some remarks on the propriety of amputating immediately below the tuberosity of the tibia, a subject of much importance, and well demanding the attention of the practical surgeon. I cannot agree with Mr. King in the rule which he there lays down for amputations generally, viz., "that the danger of the amputation is increased the nearer we approach the trunk of the body;" conceiving rather that *the danger is proportionate to the quantity of soft parts wounded in the operation;* and that, therefore, it is less dangerous to amputate immediately below the tuberosity of the tibia than at the calf of the leg. I had occasion to notice this fact in a case which occurred in my hospital practice a few months since.

William Larner, ætat. 18, presented himself amongst the out-patients at the Royal Free Hospital with a retracted and otherwise bad stump after amputation at about

the middle of the arm. I recommended secondary amputation at the shoulder-joint, to which he readily consented. Although the textures surrounding the joint were perfectly healthy, yet they had, in consequence of the loss of the remainder of the extremity, and considerable puriform discharge from the stump which had been going on for some time, become less bulky than those of the corresponding shoulder. I performed the operation on the 5th of May, with the kind assistance of Mr. Coulson, and several other professional friends present, by making two flaps, the one from the structures above, the other from those below the joint. The circumflex arteries bled freely, and required to be tied during the amputation; the axillary was small, and readily secured; several other smaller branches had ligatures put upon them, and the stump dressed by means of a few strips of adhesive plaster. Instead of the serious and sometimes fatal constitutional disturbance which generally succeeds so formidable an operation, in this case its amount was very trifling, indeed, much less than in my own experience has frequently followed what are termed minor operations. The boy's appetite scarcely flagged beneath the process of healing; the febrile efforts were scarcely noticeable; the ligatures separated within the third week, and he was discharged on the 8th of June, the stump having perfectly healed.

I cannot but think that in this case the operation would have been followed with more serious disturbance had the quantity of soft parts to be divided been larger.

Returning to the subject of amputating below the knee-joint, I cannot admit the objection to the high operation already referred to; and most fully concur in the opinion of Mr. Liston, that if the patient have a laborious occupation to follow, and cannot supply himself with an artificial leg and foot of the best quality, the shorter the stump the better, and the most serviceable will it be. In April last I had occasion to perform this operation, and chose it under the following circumstances:—

A lad (whose name I cannot now remember) applied to me at the Royal Free Hospital for advice respecting an anchylosed knee-joint which he had had for several years. The joint was so firmly fixed, most probably by ossific deposition, that I did not deem it advisable to attempt to straighten it by mechanical means subsequent to the division of the ham-strings, which would have been necessary. The lad then complained that the leg at a right angle with his thigh was a great incumbrance to him, obliged him to use a crutch, gave an obliquity to the direction of the spinal column, and thus prevented his following any useful occupation. As his health and strength were good, and his importunity that I would do something for him if possible, more than usually earnest, I suggested his losing the leg, and wearing one of wood. He readily consented, and I amputated the limb immediately below the tuberosity of the tibia. The ligatures were removed, and the stump healed with but a slight amount of febrile action, and the lad left the hospital with a wooden leg at the expiration of five weeks. I have since seen the poor fellow several times, and he has stated on each occasion that his capability of earning his means of subsistence is infinitely better than before the operation.

In the performance of this operation (supposing the flap to be chosen), the following precautions should be observed, in order to secure a ready healing of the stump:—The limb should be pierced, so that the base of each flap should as nearly correspond in size as possible; and the anterior flap should be large and more tongue-shaped than in other flap operations, so as to be adapted exactly to the posterior, which must necessarily assume that form, inasmuch as the most depending portion of it must be cut from the upper part of the calf of the leg. I remain, Sir, your obedient servant,

JOHN GAY,
Surgeon to the Royal Free Hospital, and to the Provident Clerks'-Assurance Society, &c.
12, Pavement, Finsbury,
Oct. 13, 1842.

CASE OF

CYSTIC AND PANCREATIC SARCOMA OF THE MAMMA.

By A. J. LIZARS, M.D., Professor of Anatomy in the Marischal College and University of Aberdeen.

THE subject of the present case is a widow, about sixty years of age: she never had any family, and has generally enjoyed good health. While the catamenia may be said to have ceased for nearly four years, she states that it apparently returned in very small quantity at three different times during that period; the last of these being nearly three months since.

About five years ago her attention was directed to the left mamma, in which she perceived a small tumour which gradually enlarged. The nipple began to be depressed nearly two years ago; and the tumour increased rapidly during the last three months, and became considerably harder. The pains, which were intermittent, were sharp, shooting, of short duration, but exceedingly acute, and happened about once a fortnight.

Upon examination, I found the tumour to be hard and nodulated; the nipple much retracted, and on a level with the general surface of the integuments. The skin was healthy, and had no adhesion to the tumour. The axillary glands were unaffected.

From the appearance of the parts, the his-

tory of the case, and the symptoms of the patient, I considered the disease to be carcinoma, and recommended excision. And the patient having been seen by Dr. Moir, Dr. Reid, Mr. Rainy, and Mr. Fowler, all of whom agreed in the propriety of removal, I excised the mamma on Monday, the 26th of September.

The operation was performed in the usual manner, by making two semi-elliptical incisions from axilla to sternum, parallel to the fibres of the great pectoral muscle. The flaps having been elevated, the diseased structure together with the whole mass of the mamma was removed. Very little blood was lost, and the vessels having been secured, both ends of the ligatures were cut away. The flaps were then loosely placed *in situ*, and retained by a single interrupted suture. A large piece of lint wet with cold water was applied, and the patient removed to bed; instructions having been given to the attendant to pour a little cold water on the lint occasionally.

At the expiry of seven hours the lint was removed, and no tendency to bleeding appearing, two other sutures were introduced, and four strips of isinglass plaster applied, by which the edges of the wound were completely approximated. A large piece of lint previously immersed in cold water was again placed on the wound, with instructions to the attendant, as formerly, to wet it now and then.

The day after the operation, the sutures were taken away, and the warm-water dressing substituted for the cold. This treatment has been continued until to-day, and the wound is almost entirely healed.

Upon bisecting the mamma, after its removal, the disease was found to be cystic and pancreatic sarcoma, and not carcinoma as I at first supposed.

The cysts, which are two in number, are in contact. The larger is about the size of the egg of the common fowl, and is of an irregularly nodulated form: it is placed at the base of the nipple, from which it inclines upwards and outwards. The smaller cyst is as large as a walnut, is also nodulated; and is still more external or nearer the axilla than the other. They are separated by a common septum; which, together with their parietes, is formed of strong fibrous tissue, varying from half a line to a line in thickness. The cysts were completely filled with a dark-reddish brown fluid. In the absence of my friend and colleague, Dr. Clark, I gave this to his assistant, Dr. R. White, who found it to be composed almost entirely of albumen, and coloured he thinks with hæmatin.

Attached to the septum, and extending into each cyst, there is a tumour of the size of a large hazel-nut, which appears to be pancreatic. Another about the size of a pea is situate in the large cyst opposite the preceding. Nearly the whole of the glandular tissue of the mamma is absorbed.

The importance of the present case arises from the symptoms, and the state of the parts bearing such a resemblance to carcinoma. At first sight this might appear more interesting than important, seeing that the highest authorities recommend excision in cystic sarcoma equally with scirrhus. But there are some members of the profession who are of opinion that a carcinomatous mamma should never be excised. Now from the similarity of this case to scirrhus, it is possible for a person to condemn an operation, believing the patient to be affected with the latter, while it may be the former disease. The similarity will be at once apparent by comparing the symptoms of the two.

Carcinoma.	*The Present Case.*
1. "It generally commences with a small hard tumour.	1. About five years ago she perceived a small tumour.
2. "This may either remain dormant one or two years, or increase rapidly.	2. This gradually enlarged, but increased rapidly during the last three months.
3. "The papilla becomes retracted, the mamma is indurated and nodulated, and there are acute lancinating pains."—*Lizars' Pract. Surg.*, Part II., p. 13.	3. The nipple was much retracted, the mamma was hard and nodulated, and the pains, which were intermittent, were sharp, shooting, of short duration, but exceedingly acute.

The hardness was produced by the density and thickness of the parietes of the cysts, and by their being completely distended with fluid. Upon making an incision into them, the fluid was projected to a height of about three feet. The depression of the nipple was caused by the adhesion of its base to the larger cyst.

King-street, Aberdeen,
Oct. 11, 1842.

TREATMENT OF ERYSIPELAS AND ACUTE ARTICULAR RHEUMATISM WITH THE COMP. IODINE OINTMENT.

By William Reeves, Esq.,
Surgeon to the Carlisle Dispensary.

For the last two years I have been in the habit of treating erysipelas, as well as acute articular rheumatism, by the local application of the compound iodine ointment, and with the very best result. General treatment was also had recourse to, such as bleeding, aperients, tonics, &c. &c., where necessary; and iodide of iron mixture was

found the most valuable alterative tonic when the patient required such a medicine.

Erysipelas, even the worst cases, evidently yielded on the free application of the ointment; and acute rheumatism was equally benefitted by its use. It has been applied to the face and other parts liable to the diseases, with no other than a favourable result. One case of phlegmonous erysipelas of the whole arm, where the patient had been much debilitated by previous bad habits, and where the violent inflammation and swelling had rapidly extended from the hand to the shoulder, so as to raise a doubt as to the possibility of the patient's recovery, was speedily subdued by the free application of the ointment, together with the internal administration of the iodide of iron mixture. Not being able to attend the patient further than the second visit, on account of ill health, I was unable to note the progress of the case, but was afterwards informed that he had used the ointment unsparingly; had consulted no other medical man from the time I left him, but followed up the orders he had received, and rapidly recovered. He said each application of the ointment mitigated the pain so agreeably, that he was applying it continually, and used a great quantity.

The two following cases may further illustrate the benefit of the treatment before-mentioned:—

Case 1.—Elizabeth Pool, ætat. 75, affected with erysipelas of the left foot and leg, which commenced on the 25th of September, from some irritation applied to a sore on the outside of her small toe. The ankle measured once and a half as much as the sound one, on the day I first saw her, viz., on the 27th ult. The integuments covering the dorsum of the foot had assumed a dark and shining appearance; the pain prevented her from sleeping night or day; and the inflammation was gradually extending upwards. The old woman further said, that the pain, &c., made her feel generally ill, although the functions of all the organs of her body were pretty well performed. She was, therefore, only ordered the compound iodine ointment, to be applied over and beyond the parts affected, three or four times during the day. That night she slept pretty well, and on the following day the pain, swelling, &c., had much diminished; she was, therefore, ordered to continue the use of the ointment, and some carbonate of magnesia to keep the bowels free. From this time she rapidly improved, and in a few days, as far as the erysipelas was concerned, was enabled to resume her ordinary duties.

Case 2.—Elizabeth Johnston, ætat. 49, was attacked with erysipelas of the foot and leg on the 20th ult., but did not send for medical assistance till the 27th. She then complained of great pain, swelling, and uneasiness in the right foot, ankle, and leg, which daily increased. On examination, there was intense redness and œdema of the above parts, which she said gradually extended upwards. She had scarcely slept any since the commencement of her illness; had a quick, small pulse; was troubled with indigestion, and had been so for a long time; the other functions of her body were not perceptibly deranged.

℞ *Compound iodine ointment*, ℥ij.

The parts affected to be freely anointed with this three or four times during the day.

℞ *Blue pill and compound rhubarb pill*, of each 10 grains. Make two pills. To be taken at bedtime.

℞ *Carbonate of magnesia*, ℥j;
Sulphate of magnesia, ℥jss;
Water, ℥jss. Mix.

Make a draught. To be taken in the morning.

28. Felt improved; had slept during the night tolerably well; pain and swelling much diminished; bowels moved by the medicines. Ordered to continue the ointment, which she designated "precious."

29. Can bear the limb to be freely moved; pain gone; swelling further diminished.

After this day she began to walk about, and felt but little inconvenience, yet for some time the limb became œdematous towards each evening. By the further use of the ointment, bandaging, and alterative medicines, the limb regained an equality with its fellow.

The benefit resulting from the use of this application in acute articular rheumatism, has been a diminution of the pain and rigidity, together with all the other symptoms of inflammation surrounding the joints. The other evils, such as pericarditis, &c., of this most serious malady, were treated in the usual manner, namely, by bleeding, general and local, calomel and opium, &c. &c. And once having subdued the severity of the disease, iodide of iron mixture, as recommended, was given with infinite advantage to the sufferer.

After the free use of the ointment in all the cases in which I have given it, and which are not very limited in number, there has been invariably desquamation of the cuticle of the parts anointed.

Lowther-street, Carlisle,
Oct. 12, 1842.

TYPHUS IN OLD PEOPLE.

Some years ago M. Chomel declared that he was not aware of a single authentic case of typhus fever in a person above the age of fifty-five. Since that period, M. Prus has reported an instance of a person seventy-four years of age who was affected with that disease; and M. Rayer has recently had a case in which the patient was fifty years of age when attacked.

CHOLERA

PERHAPS ASCRIBABLE TO

DISEASE OF THE SOLAR PLEXUS.

To the Editor of THE LANCET.

SIR,—I have perused with much pleasure the letter of Mr. French on "cholera," contained in the last number of your very excellent Periodical. The observations of that gentleman are exceedingly interesting. I perfectly agree with Mr. French, that the disease which is *called* "cholera" is both "simple in its nature," "and abounding in phenomena so general in their application to pathology, that a careful study of the subject cannot but be repaid by an increase to our knowledge." In a paper published in THE LANCET in the year 1836, at which time I resided at Portsmouth (I write from memory), I endeavoured to draw attention to the *pathology of the ganglionic system*, more particularly I believe than it had then, or ever has, hitherto, been done. From that period to now the subject has uninterruptedly engaged my attention, and I am induced to believe, most implicitly, that the only reply which the question that Mr. French has propounded to us, viz., "What is cholera?" will really admit of, is to be found in the paper alluded to, and to which I take the liberty very respectfully to refer those of your readers who may feel desirous to investigate the matter.

Cholera, so *called*, holds the same relation to the *solar plexus* that dementia does to the brain. What does physiology teach us in connection with it? Do we not recognise the solar plexus as the centre of every vital function, as the source of that power which enables the heart and its vessels to circulate the blood, and the lungs to decarbonise it? Do we not see that this same organ it is which enables the liver to secrete its bile, the stomach to digest its contents, the intestinal absorbents to take up their chyle, and the kidneys to excrete their peculiar fluid? Do we doubt that the solar plexus is the principal, nay the only, source of animal heat? The morbid phenomena presented to us in persons labouring under "cholera," consist of no more or less than a deprivation of these particular vital functions. What further evidence then can be required to prove my position! If the heart and its vessels did continue to beat with their accustomed and normal energy,—if the lungs still retained their power to decarbonise the blood,—if the liver continued the secretion of healthy bile, &c. &c., then only could I doubt that the solar plexus is the seat of the disease under consideration. What is the effect of a heavy blow on the epigastrium? A paralysis of the solar plexus. How indicated? By a temporary suspension of the vital functions; by syncope: which has proved fatal. Similar abnormal effects are produced by narcotic poisons, as well as by the bites of poisonous serpents. The case of poisoning from an overdose of digitalis quoted by Mr. French, proves to me that the power of the drug was expended on the solar plexus; and hence the "vomiting and retching," "the great faintness and cold sweats." The interruption to the function of the heart which your intelligent correspondent speaks of, I am disposed to regard as the mere sequence of a pre-existing cause; but this is easily seen from the observations already made. My late friend, Mr. Twining,—now deceased,—in his very admirable work "on the Diseases of Bengal," alludes to the deranged function of the heart in cholera, as sympathetic of the abnormal condition of the stomach and bowels, without, however, suspecting the seat of the disease to be the solar plexus.

Such then being the view that I take of the pathology of "cholera," allow me to make a few observations on the treatment of this formidable disease. Inasmuch as the medical attendant has to combat a disease which, as Magendie has said, "begins where others end—in death;" inasmuch, as he has to struggle against a disease which involves the very *seat of life*, it is high time that the profession were agreed on the best course to adopt. The indications of treatment I conceive to be, first, to support the *vis vitæ*; secondly, to restore the suspended functions of the abdominal organs; and, thirdly, to be on the look out for particular symptoms. The first is to be accomplished by frequently repeated and full doses of stimulants, more particularly brandy or ammonia, perhaps both. I am in the habit of prescribing a mixture, containing aromatic spirits of ammonia, strong camphor mixture, and mint water, to which, for the relief of the vomiting, I add more or less of the sedative liquor of opium, thus:—

℞ *Comp. sp. of ammonia*, 3j; *Sed. liq. of opium*, m. vj; *Strong camph. mixt.*, 3vj; *Peppermint water*, 3iij. Mix.

I direct this to be taken every fifteen or twenty minutes, and continued according to circumstances. Artificial means of warmth externally applied, must be at the same time assiduously persevered in. Considerable reaction will generally follow this plan of treatment; and then I prefer to give the effervescing draught, with six or eight or ten grains of the carbonate of ammonia, with each dose, repeated every few hours. Whilst such means are being had recourse to for the fulfilment of the first indication of treatment; the second, viz., "to restore the suspended functions of the abdominal organs," must not on any account be overlooked. With this view I invariably accompany the treatment above described with the administration of calomel and extract of colocynth, united to some essential oil or capsicum, thus:—

℞ *Submur. of mercury*, gr. iss; *Comp. extr. of colocynth*, gr. v; *Oil of cumi*, m. ij. Mix.

This pill I direct to be taken every hour or two. I am, of course, directed in its continuance by the general and particular symptoms. Within these few weeks I have had under my care five cases of "cholera" of the worst description; and in neither one was it necessary to give more than five doses of the pill in so quick succession, though it has been found indispensable to the entire restoration of the abdominal secretions, to repeat such from time to time, during the two or three days subsequent to the attack. The first effect of the pills is the appearance of bilious matter in the stools, when it is generally proper to discontinue their further employment, or else the purging will continue troublesome, though the evacuations will have lost their peculiar and abnormal character. Those gentlemen who may have been in the habit of prescribing chalk mixture and astringents will be probably disposed to condemn the practice I adopt. It will be perhaps satisfactory to add, that the treatment hereinmentioned I found in full operation at the General Hospital, Calcutta, in 1834, at which time I enjoyed the opportunities of witnessing the practice of the late lamented Mr. Twining, one of the principal medical officers of that most noble institution, and to whose admirable work before mentioned I take this opportunity to recommend the attention of all who are desirous of the best information on the "diseases of Bengal."

With respect, however, to the utility of purgative medicines in "cholera," I beg leave to add, as the result of a very large experience in the management of this distressing and awful disease, that they will be found the very best to remedy the *diarrhœa*, which is so troublesome a symptom to the patient. As regards the third indication, it will in itself suggest to the philosophical medical attendant all I could say relative to it. The dietetic treatment is, of course, of much importance. The patient must be supported throughout the disease by small quantities of good beef-tea, arrow-root, and such like; and subsequently, during convalescence, his diet should consist, in addition, of fish, light pudding, &c.

The less frequent occurrence in this country, than in India, of local inflammatory disease, either as an accompaniment or sequence of "cholera," is, I apprehend, to be attributed to the much milder character of the disease here than there: for, although I have not seen during a residence of a year and a half in Bengal, and elsewhere in India, patients "knocked down dead as if by lightning," I have not infrequently seen men die after twenty or thirty minutes' illness. In such cases the symptoms are those only of syncope or asphyxia.* Vomiting and purging, it should be well remembered, are not always present in attacks of the kind here being considered. I met with a dreadfully severe case of "cholera" about six months since, in which, although the vomiting was most urgent, the bowels were obstinately confined. Such is by no means uncommon.

Mr. French truly observes, that "a person labouring under the influence of fear, while he feels oppressed at the precordia, is attacked with diuresis; a more intense fear is attended with *diarrhœa and cold clammy sweats.*" The depression of the heart's action, however, I cannot do otherwise than regard as a mere effect of a sudden deprivation of nervous energy to that organ, the consequence of a temporary and partial suspension of the function of the solar plexus; being, in point of fact, the very same thing which transpires in cholera so called. †

It is to be regretted that so little attention has been paid to the physiology and pathology of the ganglionic system; the subject has very particularly engaged my attention for many years, and the more I reflect so much the more I am convinced that to its healthy and diseased conditions we must refer very many phenomena which are at present deemed unsatisfactory. The excito-motory system of Dr. Marshall Hall is incomplete without the aid that this much-neglected portion of our nervous system supplies. In the medusa, and others of the same class, we observe a mass of organised matter devoid of a cerebro-spinal system, yet possessed of an instinctive power, compelling it to recede from what may prove hurtful to it, &c. Does not this arise from an inherent principle, similar to that which induces even us, in the *moment* of danger and doubt, to place our extended palm across the precordia? Are not both "excito-motory" actions, so to speak? Is it not in man as in the beroe and actiniæ, an instinctive and preservative act, arising out of some peculiar impression acting on the vital class of nerves, and of which, of course, the animal is almost wholly composed? The affected Miss, though ignorant of physiology or pathology, and perhaps of all other ologies, if either alarmed, or professing to be, at any sufficient or insufficient cause of personal danger, quickly applies her hand to the precordia, as if the solar plexus screamed "take care of me now." The brain with us, of course, takes cognisance of the danger, should there be any, and which in the medusariæ must be supplied by *sensation*, through the medium of the tenta-

* "Syncopal asphyxia." M. Chevalier.

† This circumstance I regard more particularly in reference to the anatomical relationship of the greater splanchnic nerve, being connected as that nerve is with both the thorax and the abdomen.

culæ, a sensation which exists, too, independent of a cerebro-spinal system.* *Pathology*, if I mistake not, will supply us with phenomena in which this same sensation, *variously modified* in the human race, will enable us eventually to illustrate the precise nature of diseases, concerning which almost all we now know is conjectural.

A very interesting question which presents itself for our consideration, in reviewing the relative physiological powers of the different nervous centres is, What instinctive agency determines the young of the mammiferous tribes to *seek* its particular means of support? Why is so keen a choice displayed for that which nature has so especially predestined for its use? We cannot hope to solve this question by any reference to the demonstrated functions of the cerebro-spinal system. I make no doubt the fact has an exclusive dependency on the solar plexus, the centre of the ganglionic system. What more reasonable than to expect that that organ, the sum of whose function may be, in one word, described as *life*, should preside over actions so indispensable to both its integrity and well-being. Among the lower classes of animals, viz., the genera mollusca and articulata, &c., we observe the operation of a peculiar *instinct*,† which enables the animal both to guard against contingencies and anticipate difficulties; to provide for all the necessaries of life, whether they relate to the kind of habitation, mode of progression, the kind of food required for its sustenance, &c. Now I take the liberty to suggest that this peculiar *instinct* constitutes the function of the vital class of nerves, or the great sympathetic, as it has been termed. And should this position be ultimately verified, the great objection of Dr. Pritchard to phrenology will be removed.‡ Though anatomists may demonstrate a cerebro-spinal system in insects, yet we cannot well refer all their mental qualifications, if such they must be called, to the exclusive operation of the cerebrum: so, however, it appears to me.§

In conclusion, I would briefly direct attention to the *pathology* of the great sympathetic. The quality of the blood in fevers and cholera has been shown to be similar by the experiments of Dr. Stevens. This fact I regard as the consequence of the abstraction of nervous energy from the lungs, as before shown, whereby the decarbonisation of the blood is discontinued. Carbonic acid (says Dr. Stevens) will decompose the blood, as is seen in cholera and fever.

Müller, in his "Elements of Physiology," says carbonic acid has "a narcotic action on the system, producing asphyxia, without exciting any symptoms of suffocation." Cholera and fever is identical, say Dr. Alison* and Dr. Billing.† Dr. John Davy tells us that the expired air of persons labouring under cholera and fever contains less of carbonic acid than it should do; and Dr. Wilson Philip assures us that the same result is obtained by tying or dividing the par vagum. The inference from all which is too apparent to require mention. Cholera and fever I consider to involve probably the *whole* of the sympathetic, though they have their rise in the solar plexus. Other diseases appear to have a local dependence: thus, angina pectoris, I believe, dependent on some abnormal condition of the cardiac plexus,‡ holding the same relation to each other which I conceive asthma does to the pulmonic plexus, pertussis to the internal branches of the superior cervical ganglion, and diabetes to the renal ganglion.

You will remember, Mr. Editor, receiving a paper from me, some two or three years since, containing the autopsy of a boy who had died of diabetes, and in whom the renal plexus presented a very diseased appearance. The paper was mislaid by some chance. It is well known that injury or disease of "the superior cervical ganglion" produces "inflammation of the eye, with effusion of lymph." Chorea and hysteria, I have reason to believe, is associated with the great sympathetic nerve, as well as chlorosis and anemia, &c.

If these observations have the effect of drawing the attention of the profession more particularly to the subject of this paper, I shall be very glad. Within the compass afforded me I could not be expected to adduce a very great deal of *evidence* to prove my positions: however, such might yet appear. I am, Sir, your most obedient servant,

JAS. GEO. DAVEY, M.R.C.S.

One of the Surgeons of the County Lunatic Asylum at Hanwell.

Hanwell, Middlesex,
Oct. 1, 1842.

* See the late Dr. Fletcher's (Edinburgh) very splendid lectures on physiology.

† See Roget's Bridgewater Treatise.

‡ See Pritchard on Disorders of the Mind. Appendix.

§ In the instances of decapitated animals, as fowls, &c., and in those of acephalous monsters, conclusive reasoning may be supplied, if I mistake not.

* See Alison's Outlines of Pathology.

† See Billing's Elements of Medicine, Preface to 2nd or 3rd edit.

‡ Laennec located this disease in the pneumogastric nerves.

EVIDENCE AND ARGUMENTS

IN PROOF OF THE EXISTENCE OF

A GENERAL LAW

OF

PERIODICITY IN THE PHENOMENA OF LIFE.

By Thomas Laycock, M.D.,

Physician to the York Dispensary, &c.

[Read at the Meeting of the British Association for the Advancement of Science, held in 1842, and communicated to The Lancet by the Author, and designed to be illustrated by farther observations and inquiries.]

The object of this paper is to exhibit a general law of vital periodicity, to illustrate that law by pathological phenomena, and to show how it may be investigated and applied to medicine.

It is well known to physicians that there is a large class of diseases, the symptoms of which recur at regular intervals of time. It so happened that I had appointed myself the task of investigating those nervous affections belonging to this class to which the sex is more peculiarly liable, and I directed my inquiries in particular to the rule or law by which the interval between the paroxysms is regulated. Of course the phenomena of menstruation first demanded my attention, as a normal periodic movement in the sex. In the course of my inquiries I ascertained (with other general facts) that the interval between each menstrual period was not constantly a lunar month; but two weeks, three weeks, five weeks, and even six weeks. I ascertained, also, that the usual coloured flow frequently alternated every fortnight, sometimes every month, with a white discharge. Facts being such, I determined on counting the intervals by weeks.

The circumstances connected with menstruation led necessarily to those connected with the period of utero-gestation in the human female. This, it is well known, is usually forty weeks; but here again I found numerous exceptions to the general law. These exceptions, however, allowing for slight inaccuracies in observing, were like those just now mentioned, that is to say, the period was exceeded or shortened by weeks. I then turned my attention to the periods of utero-gestation in lower animals, as I felt anxious to learn whether any such limitation of the period by weeks could be traced as affecting them. I tabulated the periods of gestation in various mammals, and the period of incubation in birds, as they were stated in works on natural history, and as I could make them out from personal inquiries whenever opportunity offered. Of course rigid accuracy could not be looked for, in observations of this kind, but, such as they were, they confirmed the general law of limitation by weeks observed in the sex. I collected tolerably trustworthy observations of this kind referring to one hundred and twenty-nine species of birds and mammals (some being, indeed, rigidly exact), and in sixty-seven of these the periods of utero-gestation and incubation were a definite number of weeks or months; twenty-four exhibited periods being within a day of a definite number, and in the remaining thirty-nine the period was so loosely stated as not to be of much weight either for or against the general law, although by far the greater number were decidedly favourable. Altogether I judged that there were only four available exceptions. As examples of this law may be stated—in the grallidæ, tetraonidæ, and other birds of about the same size, the period of incubation is three weeks; in the anatidæ, four weeks; the cygnidæ, six weeks; but in small birds, as the musciparæ, only two weeks.

I now extended my inquiries into the habits and physiology of animals lower in the scale. I found only two instances in which the period of incubation in fishes and reptiles was stated. Dr. Knox took great pains in ascertaining the facts connected with the development of the ova of the salmon, and found that the period of incubation or hatching was exactly one hundred and forty days, or twenty complete weeks. The other example is the aquatic salamander, the ova of which are hatched in fifteen days. But I found the most remarkable illustrations and confirmation of the law in insects. The changes to be noticed in insects as being regulated, as regards the time they occupy by this law, are the following:—

1. The hatching of the ova.
2. The caterpillar, or larva state, and the moults which take place at that stage of development.
3. The pupa, or chrysalis, period.
4. The imago state, or puberty.

The ova are hatched in periods varying considerably in length. The shortest is half a week, or seven lunar days, as in the wasp, the common bee, and ichneumon; in some, as the *cecidomia tritici*, the period is one week; in others it is a week and a half, as, for example, the black caterpillar and the gooseberry grub (*tenthredo capreæ*). In the majority of insects, however, it is from two weeks to six weeks. The ova of the glow-worm occupy six weeks, of the mole-cricket only four weeks, in hatching. The period passed by insects in the larva will vary in length as the insect varies; but I think it is seldom less than seven days. In the common bee it is six days and a half, in the humble bee seven days exactly. In day-papiliones it is four weeks, in moths six weeks. In many insects it is a long period, continuing for months. The larva of a new British wasp, of the genus oplopus, occupies twelve weeks, namely, from the period when

its two first segments coalesced to the throwing off of its exuviæ was three weeks, and from the time of the latter change to its full development, nine weeks. It is worthy of notice, that the time occupied between each exuviation of the larva is limited in the same manner as the period of the larva state itself is limited. Thus, the latter period of the common black caterpillar is twenty-one days, or three weeks: during this period it exuviates, or changes its skin three times, at intervals of seven days each. The wood-piercer bee is in the larva state four weeks; of these four weeks it fasts exactly one, just before it enters the pupa state.

The period spent in the pupa state is the most in accordance with the general law of limitation by weeks; in fact, the more exact the observations are as to the length of this period, the more confirmatory are they of the general rule. For example, Mr. Denny had three larvæ of the *sphinx atropos*, which went into the earth on August 22nd, 24th, and September 2nd, respectively. They appeared as perfect moths on October 16th, 18th, and 27th; or, in each case, in exactly eight weeks. If the pupa state is entered late in the summer, the perfect insect does not appear until the following spring. Larvæ and ova will also hybernate in the same way; but in all cases the period occupied is a definite number of weeks, some are forty, others forty-two, and forty-eight weeks.

I have not been able to collate observations as to the duration of the imago state, very few having been made; but the vital actions of the perfect insect appear subject to the same general law. Thus twenty or twenty-one days after the queen bee has begun to lay the eggs of drones, the bees begin to construct royal cells; the eggs of young queens are furnished with royal cells on the fourth day. If the impregnation of the queen be retarded beyond the twenty-first day (Huber), or twenty-eighth (Kirby and Spence), of her whole existence, she lays only male eggs; and Huber states that after the twenty-eighth day, under these circumstances, she loses all feelings of jealousy towards the young queens in the nymphine state, and never attempts to injure them. Some insects attain puberty almost immediately after leaving the puparium; others are a considerable time before their organs acquire sufficient hardness, especially some of the beetle tribe. Thus the newly-disclosed imago of *cetonia aurata* remains a fortnight under the earth, and that of *lucanus cervus* not less than three weeks.

There are various changes and functions in animals amenable to the same general law. The moults of insects, for example, as of the *arachnida*, *myriapoda*, and *crustacea*, the exuviation of serpents, and the renewal of the dermoid appendages in birds and mammals, are all regulated by it more or less. And so are minor processes in the last mentioned as well as in insects. Thus the ring-pigeon not only sits fourteen days, but lays eggs, previous to sitting, for fourteen days. The female of the great seal calves on the rocks, and suckles its young at every tide for fourteen or fifteen days, when the calf casts its coat, and goes to the water.

The facts I have briefly glanced at are general facts, and cannot happen day after day in so many millions of animals of every kind from the larva or ovum of a minute insect up to man, at definite periods, from a mere chance or coincidence; and although temperature, food, domestication, and other modifying circumstances, may and do interrupt the regularity with which the various processes, I have alluded to, are conducted, yet upon the whole it is, I think, impossible to come to any less general conclusion than this, that, in animals, changes occur every three and a half, seven, fourteen, twenty-one, or twenty-eight days, or at some definite number of weeks.

Having made good the ground by collating the facts in physiology and natural history bearing upon the periodicity of vital movements, we can enter upon a consideration of this periodicity as it is exhibited in disease. It is not my intention to pass over the whole domain of pathology, as to do so would extend this communication to an unnecessary length. I propose to confine my attention principally to *the large class of febrile diseases*, noticing, however, also, some points in *the pathology of gout*.

To begin with the *exanthemata* and with *small-pox*, as the best understood and most decided of the class. Sydenham states that the distinct small-pox comes out mostly on the fourth day inclusive, from the beginning of the illness; the pustules begin to suppurate on the eighth; on the eleventh the swelling and inflammation manifestly abate, and quite disappear on the fourteenth or fifteenth. Suppuration is usually completed in the mildest sort of confluent small-pox on the eleventh day, in the middle sort on the fourteenth, and in the worst on the seventeenth. Irregular symptoms happen on the eighth day in the distinct, and on the eleventh in the confluent form; and these are the most dangerous days in each, but in some anomalous forms the fourteenth day was the most dangerous, and in the epidemic of the year 1674 there was danger after the twentieth. As a general rule, the severity of the disease is proportionate to the early appearance of the eruption. An eruption on the first day indicates a very fatal affection. Now these statements of Sydenham are not merely theoretical, or dependent upon some fantastical hypothesis, for one of the most recent of our systematic writers on medicine, Dr. Craigie, thus remarks,—"In the distinct small-pox, which is also generally

regular in its course, it is convenient to divide the course into four stages. First, the febrile, from the first day to the fourth; second, the eruptive, from the fourth day to the seventh; third, the ripening, from the seventh to the eleventh; and fourth, the stage of desiccation, from the eleventh to the fourteenth or fifteenth day." If the bronchial disorder in small-pox (Dr. Craigie adds) become intense, it terminates in fatal effusion into the pulmonic vesicles on the fourteenth day.

Anomalous small-pox, vaccinia, and varicella follow the same order of development, as well as rubeola and scarlatina. Thus of measles Dr. Craigie states (in accordance with Sydenham and Van Swieten), "in this disease the rash appears on the fourth day;" and of scarlatina, "the fourth day may be deemed the period at which the eruption and also the fever attain their greatest intensity." Measles decline on the eighth day. A peculiar form of scarlatina has been prevalent of late in the West Indies (termed vernacularly the dandy fever), characterised by violent rheumatic symptoms. The peculiar efflorescence and secondary fever usually came on on the third or fourth day after the first attack. The *rötheln*, an exanthem intermediate in character between measles and scarlatina, is not so regular in its stages, but sufficiently so to exhibit its consanguinity with the preceding. The exanthematous typhus appears to be as regular in its stages as variola, but differs in exhibiting the tertian type rather than the quartan. It is, however, "a twenty-one day fever."

There are two other acute eruptive diseases which may be here mentioned. The bullæ of pemphigus appear on the eleventh day. Dr. Bateman casually observes, respecting a case of shingles, noticed in one of his reports from the Carey-street Dispensary, "as is usual, the disorder began and terminated its course in *fourteen days*, going through its changes of vesicle, pustule, and scab, with its accustomed regularity. From the commencement of these reports I have seen twenty-three cases."

Intermittent fevers display the influence of a law of vital periodicity more distinctly, perhaps, than any other class of febrile affections. There are three principal forms, the quotidian ague, the paroxysm recurring every day; the tertian, every third counting the day on which the preceding paroxysm occurred; and the quartan, in which there are two entire days of freedom from fever between each paroxysm. The tertian, according to most writers, runs itself out in seven paroxysms, occupying fourteen days, the *interval* between each paroxysm being forty-eight hours. The hemitertian, double tertian, alternate tertian, and quartan, &c., are compounded of these three primary forms.

The intermittents bring us to the remittent and malignant fevers. That these are identical in origin with intermittents is not, I believe, now doubted by any one well acquainted with the subject. It has been found all over the world that intermittent, remittent, and malignant fevers pass one into the other. In Spain and in India, in the West Indies and in Sicily, in Africa and in America, this fact has been substantiated by such numerous and competent observers as to set the question at rest. If the febrific poison be concentrated and the temperature high, the fever is intense, proving fatal in a few hours or days,—often, indeed, without a remission. But if the malaria be less concentrated, and the temperature comparatively low, as in Spain, for example, at the beginning of summer and the end of autumn; or if the locality be an elevated one within the tropics, then the fever will be less malignant; probably a regular remittent, or an intermittent. The *kind* of intermittent depends upon similar modifications in circumstances. The yellow fever within the tropics may be at once changed by medicine into a quotidian intermittent; or in temperate latitudes the remissions of a malignant remittent become more complete towards the end of summer, until at last we have quotidian agues; later on they assume the tertian type; and far into autumn, quartans take the place of tertians.

As we expect similar effects from similar causes, it is no irrational inference that since intermittents present so constant and regular an order in their progress, their congeners, the remittent and malignant fevers, will exhibit, *mutatis mutandis*, a similar regularity. The regularity thus theoretically inferred has been actually observed for many centuries, and has given rise to *the doctrine of critical days in fevers*.

Before we compare these fevers with intermittents, it is necessary to understand the meaning of the term critical day, for it is very obvious that the writer who first laid down the doctrine *in extenso*, attached a meaning to the term, differing very considerably from the modern meaning, or even from the notions of Galen. In the essay on the judicatory, or critical days, found among the writings of Hippocrates, a critical day is shown to be that day on which certain symptoms will appear, enabling us to ascertain—first, the probable duration or termination of the disease; and, secondly, the symptoms likely to appear on certain future days. The act of mind which deduced these inferences was termed a judication (judicationes,—κρίσεις), and the days on which that act was to be made were termed judicatory (κρίσιμος). So a day might be judicatory, first of the disease, its course and termination; secondly, of the symptoms to happen on another day. Thus jaundice and hiccup, appearing on the fifth day of fever, indicated a fatal disease; jaundice, on or after the seventh, indicated

diaphoresis; on the seventh, ninth, eleventh, and fourteenth (if unaccompanied by hardness in the precordia), a favourable termination. In pleurisy, if the fever abates on the seventh day, the patient will recover; if it do not, the disease will be prolonged to the eleventh or fourteenth, on which days it is often fatal. This is the first and plainest exposition of the doctrine of critical days, and, I believe, is perfectly correct. If Hippocrates had described the critical days in small-pox, it would have probably been after this manner: "in a fever commencing with rigors, pain in the precordia, and vomiting, if pimples appear on the fourth day, they will begin to suppurate after the seventh; on the eleventh the swelling and inflammation will manifestly abate, and quite disappear on the fourteenth. If the swelling and inflammation do not abate on the eleventh day, death will take place on the fourteenth." That is something like what a Hippocratic aphorism would have been respecting small-pox. Similar examples might be drawn from the prognosis of tertian fevers; in this respect, Stoll and Ætius are perfectly agreed. The latter author has two chapters on the method of prognosticating the day and hour of a person's death. The day is to be ascertained by noticing on what critical days the attacks are most severe; the hour, by observing at what time of the day the exacerbation comes on, and at what period of the exacerbation the patient is most languid; "for (says Ætius), at that hour at which the pulse is most depressed, death will take place." A prediction obviously founded on data similar to those by which we foretell the paroxysm of a tertian or quartan ague.

Having thus shortly elucidated the doctrine of critical days, and placed it in the simplest point of view, I have now to make good my comparison of the critical days of febrile diseases, and the order of sequence observed by intermittents; and further, I have to compare both these forms of fever with the periodicity observed in the exanthemata, and make the facts bearing upon that part of their pathology harmonise with each other.

The critical days, according to Hippocrates, are,	1	4	7	9	11	14	17	20	or	21.	
The paroxysms of a tertian will take place on the	1	3	5	7	9	11	13	15	17	19	21
	—	—	—	—	—	—	—	—	—	—	—
	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.	8 p.	9 p.	10 p.	11 p.
Ditto of a quartan on	1	4	7	10	13	16	19				
	—	—	—	—	—	—	—				
	1 p.	2 p.	3 p.	4 p.	5 p.	6 p.	7 p.				

And if a continued fever existed with tertian or quartan exacerbations, the more violent symptoms might be expected to appear on the days indicated. On comparing the order of days, discrepancies between the three are sufficiently obvious on a superficial consideration, but many of them disappear on more particular inquiry. Supposing a remittent fever has the quartan type, and that, after the fourth paroxysm, an intermission takes place, on what day would the amendment appear? Clearly on the eleventh; and the change of symptoms on that day would be judicatory of a mild paroxysm on the thirteenth, and final amendment on the fourteenth. If the intermission occurred after the fifth paroxysm, then the fourteenth would be the critical day; if at the sixth, the seventeenth; if at the seventh paroxysm, the fever ends on the twentieth day. Some fevers, however, have the tertian, others the quotidian type; and this leads to the observation that there are certain days to be distinguished from the rest. Whatever type the fever may exhibit, there will be a paroxysm on the seventh day, and consequently this day should be distinguished by an unusual fatality or number of crises. For analogous reasons the fourteenth will be remarkable as a day of amendment, the last paroxysm of a quotidian taking place on that day, and the last of a tertian on the day previous; for observation has established that if a tertian is to cease about the fourth paroxysm (the seventh critical day), the second paroxysm will be more severe than the first or third; but if the fourth be severe, and the fifth less so, the disease will end at the seventh paroxysm, and, of course, the change for the better, if this rule be applied to remittent or continued fevers, will be seen on the fourteenth day. Should, however, the exacerbation occurring on the thirteenth day end fatally, whether it be the seventh of a tertian or the fifth of a quartan, death will probably take place early on the fourteenth day, namely, about three or four o'clock, a.m., when the system is most languid.

But it may be asked, are these theoretical inferences respecting the seventh and fourteenth day, corroborated by what actually occurs in fevers? To this I answer that, in point of fact, those days *are* the most distinguished in the way I have inferred they should be. It is a statement upon which all writers on the subject are perfectly in harmony, and which has been deduced numerically, as, for example, by De Haen from one hundred and sixty-three cases recorded by Hippocrates. Forestus relates (according

to Nihell) forty-eight cases of acute fever, without any reference to critical days; five of these terminated on the fourth day, twenty-two on the seventh, two on the eleventh, and seven on the fourteenth. The cases detailed by Stoll in his *Ratio medendi*, exhibit the same general fact; the seventh and fourteenth days, and then the fourth and eleventh, are the most remarkable. This is also the fact as regards malignant remittents, according to numerous writers.

With regard to the exanthematous fevers, it will be seen at once that the "critical days" they exhibit occur in quartan order; variola has been already mentioned in illustration. Exanthematous typhus exhibits the tertian type, and (as might be inferred) the critical days in this fever are the fifth, seventh, ninth, eleventh, and twenty-first. Scarlatina is sometimes tertian, sometimes quartan.

In making the preceding statements, I have limited myself to general facts: their accordance, as regards *the measure of time* with the general facts deduced from natural history, cannot but be observed. The next step would be to adopt some theory by which they might all be brought into harmony. Before attempting this, however, I will show that the law of vital periodicity is not demonstrated solely by the pathology of fevers, and for this purpose I will take up the pathology of a paroxysm of gout. It is well known that the paroxysm of an intermittent commences at a certain hour on each day with very great regularity; sometimes with absolute exactitude. The febrile action attending a paroxysm of regular gout exhibits similar punctuality in its accession, and two o'clock in the morning is the hour at which it takes place. A fit of the gout going regularly through its stages in a robust subject observes the following order. The patient retires to rest well, or perhaps in better spirits than usual, and is awoke at two o'clock in the morning by rigors, thirst, and other febrile symptoms, and with pain in the great toe, or heel, or other part. This pain and the febrile action go on increasing for exactly twenty-four hours, that is to say, until two o'clock, a.m., comes again, when a remission takes place, sometimes an intermission; the interval it occupies being another *nyctemeron* or period of twenty-four hours, at the end of which another febrile paroxysm comes on. And so paroxysm and remission or intermission alternate, until the fit terminates. A fit of the gout, under the circumstances stated, is a tertian intermittent (in the *measure of its intervals*), and, like a tertian, it terminates in fourteen days, or after seven paroxysms. If the patient go on luxuriating in his diet, the next fit, if left to flannel and patience, will be of a double length, or occupy twenty-eight days, and have fourteen febrile paroxysms or exacerbations; or it will be tripled, and be of six weeks' duration, and so go on increasing in length by a definite ratio of weeks, as the predisposing and exciting causes become more efficient, until the viscera and the general system become so deranged that no regular fit takes place. Of course, just as the regular course of agues may be broken, so may be that of a gouty paroxysm; and so also may the type of the fever vary. It may become quartan, or even septiman, as I have myself observed; it may also be hemitertian, or a double tertian, that is to say, the exacerbation may occur at two o'clock, a.m., and again at four o'clock, p.m.

I have been induced to select the phenomena of gout as illustrating the general law of vital periodicity, because they resemble those of intermittent fevers in other respects. It is well known that there are intermittent neuroses, neuroses induced by malaria, as for example various neuralgiæ, coma, convulsions, &c.; and I am well convinced, both from personal observation and considerable research, that gout in certain constitutions, and especially in females, appears only as a neurosis, and frequently a neurosis of a paroxysmal or intermittent kind.

The doctrine of critical days was extended by its first propounders and their successors to all acute affections. I have examined a number of cases of disease detailed in the medical periodicals, with the desire to ascertain whether this part of the doctrine was correct. The dates, however, are so inexact, that only a small minority could be made available; but whenever the dates were accurately given, the case confirmed the doctrine. Periodic hæmorrhages, especially hæmorrhages from the hæmorrhoidal vessels, and periodic nervous affections, as epilepsy, have the intervals between the paroxysms very often limited by weeks. And I should say that in chronic diseases, to which the doctrine of crises was seldom applied, the law may be traced. It is impossible to attend cases of this kind diligently, without observing a movement of a tertian or quartan type, or, in clinical phraseology, a good and bad day. I will not, however, risk the charge of tediousness by entering upon these; but would rather draw an argument in support of this great general law, from the singular fact that the phenomena exhibiting its influence have been observed for many ages, and most probably from a very remote antiquity. It cannot have escaped notice that a *period of seven days*, and *definite fractions or multiples of that period*, are very prominent in the series of phenomena I have noticed; and it is a direct inference that the doctrine of "septenaries," so much considered in ancient philosophy, was based upon similar observations. Indeed, the great fact of vital periodicity is *assumed* by ancient writers, as if it were too well known to be disputed, and is made the basis of a vast number of speculations, many of them fanci-

ful enough, but some, I am convinced, containing "more things than are dreamt of in our philosophy." This doctrine of "septenaries" is discussed by Hippocrates, by Diocles (whom the Athenians called "the second Hippocrates"), by Galen, and by the Greek writers, as well as by their commentators in the middle ages. Celsus remarks that the doctrine of septenary changes in disease, and of equal and unequal days, was derived from the opinions of Pythagoras with regard to the influence of numbers. Now these opinions were certainly not originated by that philosopher, but were derived by him from the ancient Egyptians, or Chaldeans. The number seven in this system was the most perfect and important of all. That the doctrine of critical days was known to and acted on by the ancient Egyptians, is clear from various fragments of their medical science which have been accidentally transmitted to us. The use of *the number seven* from the earliest ages, as well in mythology as in science and the arts, and by nations very widely separated, is of itself a subject for most interesting speculation. I have made inquiry into the relations which this singular fact bears to the law of vital periodicity I am attempting to demonstrate; and I have been led to the opinion that the use of that number was closely connected with the principles of a science, or more properly *a system of vital proleptics*, now utterly lost, and which was founded on the observation of periodic vital and meteorological phenomena. The remains of this science appear (as if fossilized) in the quackery of nativity-casters, astrologers, &c. If our meteorology and the knowledge of vital periodic movements were as perfect as our astronomical science, we might possibly be able to do that which Diodorus Siculus asserts the ancient Egyptians could accomplish. "They," (the Egyptians) that writer remarks, "frequently foretell what is to happen to a man throughout his life; and not uncommonly predict the failure of crops, or an abundance, and the occurrence of epidemic diseases among men and beasts; foreseeing, also, earthquakes and floods, the *appearance of comets*, and a variety of other things which appear impossible to the multitude," &c. It is a singular fact that meteorological science, with all our scientific improvements, is still in its infancy; and its value so unknown, that many people would think it presumption little less than blasphemous to hint at the possibility of predicting from scientific data the occurrence of storms, floods, and earthquakes, good and bad harvests, and the return of epidemic diseases.

(To be concluded.)

DR. COLLIER AND INTRA-COMBUSTION.

To the Editor of THE LANCET.

SIR,—In my last letter I commenced by saying that I despised the spirit of jumping-up-behindism, a phrase in which I am not original. You have made me say that I despise the spirit of jumping up behind surgeons. You are in error in supposing that my theory was limited to the union of carbon and oxygen. Pray do me the favour (sneers about doctorials apart, which can have nothing to do with the matter) to say whether my challenge recorded in the letter aforesaid, and I must trouble you to read it, will be fairly accepted, and whether, for the love of fair play and in the spirit of the investigation of truth, your columns will be open to the extent of three or four pages for proof of my assertions. Your anonymous correspondents can amuse themselves afterwards. I promise them they shall have all that kind of fun exclusively to themselves. I will state my case, retire from the bar of public judgment, and pledge myself to make no further rejoinder, and I will prove, if I mistake not (and we are none of us infallible), all I have propounded. My hearty thanks to your correspondents! If my distributive claim have not salt enough to resist putrefaction, then let it dissolve, but let me ask the gentlemen to hold their noses awhile, if but for courtesy's sake. I am, Sir, your obedient servant,

G. F. COLLIER,
A Labourer for Twenty Years in the Laboratory as well as the Library.
Spring-gardens, Oct. 10, 1842.

"Notwithstanding the beautiful chemic theory of Dr. Crawford and the experiments of modern physiologists, there is yet room to admit of a third means of the elimination of heat in the body by the process of digestion and innutrition, for it is quite certain that any long-continued enervation of the stomach is sure to be accompanied with an universal reduction of temperature, as it is in pyrosis. I think it may readily be proved that the power of resisting intense cold does not depend upon any extraordinary energy in the pulmonary system so much as it does on gastric vigour. It is for this last that the constitution of the Esquimaux is so remarkable, and it is this which enables their females to expose their breasts to their sucking infants in the open air when the thermometer is standing many degrees below zero. Can any one reasonably doubt that the extensive use of a vegetable diet, if substituted for their gross diet of flesh and blubber oil, would, in these inhabitants of the Arctic region, diminish their temperative power, and induce disease. I hold it worth while to reflect that the vigour of the stomach is

found to be greater in the human race as we recede from the tropics, and that it is comparatively a languid organ in hot latitudes. Although I am led to suppose that every part exerts some power in producing *its own heat*, I cannot but believe that the principle of producing heat not only in itself, but for diffusion in distant parts resides in an eminent degree in the stomach, &c. &c."—(Dr. West on Pyrosis, p. 44, after Dr. Collier and before Dr. Liebig. Longman and Co.) Let any liberal man take up Liebig and see whether he can find the substance of the above paragraph. I will show what I *do* claim, and what I do *not* claim, if I may be so allowed. Crawford's theory of hydro-carbon and its pulmonary changes I claim not, believing it to be correct as far as it went: I might as well claim the circulation of the blood. Abernethy's extension of it (*inter alios*) to the skin I claim not, believing that also to be correct as far as it went. Brodie's nervous theory I claim not, believing that also to be defective as a whole, but even now intact and undamaged if considered as a collateral and partial explanation of the development of animal heat.—G. F. C.

STARTLING CRANIOTOMY.

To the Editor of THE LANCET.

SIR,—The number of your contemporary for October 7, contains a lecture by Dr. Robert Lee, from which I extract the following paragraph:—

"During the last fifteen years, in public institutions and private practice, I have seen fifty-five cases of difficult and protracted labour in which recourse was had to the forceps, and *above one hundred* in which delivery was effected by *craniotomy!*"

Can this be correct? Search all the records of all the lying-in hospitals, see the tables in all the publications on midwifery, both in this and in other countries, and then say what other practitioner ever had, or, rather, ever made, such a horrible proportion—such a wholesale slaughter of innocents—outheroding Herod. Dr. Blundell used to talk in his lectures of the "fatal facility" of the craniotomy operations, and the unfortunate comparison of readiness with which the perforator could be used, compared with the forceps; but in all Dr. Blundell's experience I doubt whether he ever anticipated such a confirmation of his warnings.

Should the poor-law commissioners hear this tale, they will speedily pass a regulation that pupils of Dr. Robert Lee should always be selected as the parish surgeons—upwards of one hundred cases of breaking-up of the brain of unborn babes to fifty-five of lives saved by the forceps! Pray, Sir, warn the unsuspecting students that a delicate hand, patience, and an innocent instrument, are more worthy to be employed than the means by which fœtal skulls may be crushed to save an hour or two of time, and hurry off to another patient. Yours obediently,

BLUNDELLULUS.

REVIEW OF

MR. EAGLE'S PROPOSITION TO EXCISE THE SPLEEN.

A CORRESPONDENT, under the signature of "Milesius," offers numerous objections to the proposal of Mr. Eagle to excise the spleen as a remedy for some "incurable" diseases, LANCET, Oct. 8. He denies the utility or even the practicability of the operation, in face both of the experiments related by Mr. Eagle, and the three cases of the removal of the spleen in the human subject; the latter cases bearing (says our correspondent) very little on the main point, namely, the practicability of the operation, inasmuch as in neither of them was a *bonâ fide* operation performed, excepting, perhaps, the first, the circumstances of which, purporting to have taken place so long ago as the battle of Dettingen, we may easily suppose to have become gradually magnified up to the present time. In the third case a portion only (the extent not stated) protruding out of a lacerated wound, was excised six days after the accident, when, more than probably, gangrene of the exposed portion had taken place, and the consequent coagulation of the blood in the adjacent vessels had obviated the danger of hæmorrhage. The second case (continues the critic) is so loosely detailed, that even the patient's professed observation to "some one" (subsequent to operation), that "he felt as well as ever he did," is not sufficient to render it conclusive. A case is on record ("Dublin Hospital Reports") of the removal, with impunity, of a large portion of the lung, protruding after a spear wound in the thorax; but who, in his sober senses, would suppose from that instance (or fifty such) that the excision of the lung by surgical means, from its normal situation, was a measure of sanity? Yet, arguing like Mr. Eagle, we might deem it still more advantageous in tubercular consumption than excision of the spleen, and therefore more worthy of experimental inquiry, did not common sense suggest the extreme probability that protruded organs, or portions of organs, had (by the laceration more or less of their attachments, nervous, cellular, and vascular, caused by the same force which effected their displacement) lost the "right of tenantry," and become foreign to the animal economy. As for the utility of the operation, Mr. Eagle says that *he knows* that idiopathic and secondary disease of the spleen exist in this country, unrecognised as

such by the common sense of the medical profession, although pointed out by Hippocrates. He *knows* it, and therefore a *fact* it must be! Hippocrates said so two thousand years ago, and therefore, of course, it is beyond doubt! The profession do not recognise it; *ergo*, the profession are ignoramuses, and Mr. Eagle the only man "skilled in diagnosis" amongst them!

His two first experiments do not bear on the point to be discussed, I merely, therefore, observe *en passant*, that the operation (if properly trumpeted, in the Yearsley style) may become the rage amongst certain classes, and be a desideratum in the art of "flat-catching."

Pass we now to the "effects of tying the splenic artery in liver tubercular consumption in rabbits." In his first observation, the vagueness of the principal statement renders comment unnecessary. The case goes for nothing.

In his second experiment he observed only one tubercle at the time of operation, but a large quantity after some time. This is truly inconsistent with the idea of "arresting" tubercular disorganisation.

In his third case, he finds *after death* (there being no positive evidence of tubercles existing previously) "cartilaginous deposits," &c. This specimen he shows to Dr. Blundell, and the doctor, one of the most accurate pathologists of the day, declines giving an opinion; but Mr. Eagle says it is an instance of tubercular cicatrisation, for which we have only his *ipse dixit*. The possibility of his being mistaken never enters his mind.

In his last experiment he finds fibrous specks, "as if" of tubercles, entirely cicatrised; so that his whole exposition of the advantages of the operation rests solely on suppositious and visionary grounds; indeed, not one of his experiments appears satisfactory *to himself*; for the induction from each, taken *seriatim*, is an example of what Lindley Murray terms "the contingent or doubtful," as shown by the expressions "tubercles dry," as if "partly;" "I should say approaching to;" "apparently the complete cicatrices;" "as if of tubercles," &c.

I only add, that I highly applaud Mr. Eagle's resolution of answering all critical remarks in "the lump." It presents a striking similarity to the valorous resolve of the celebrated Fitzjames:—

> "Come one, come all; this rock shall fly
> From its firm base as soon as I!"

Ampthill, Oct. 13, 1842.

AN ALARM TO PHYSIOLOGISTS.

The American physician (Dr. Martin Paine, of New York,) who says that he has been invited recently by Dr. Forbes to write criticisms in the "Brit. and For. Medical Review," thus attacks the Liebig school of investigators, in the preface to his "Essays on Vitality:"—

The labours now in progress in organic chemistry tend to the subversion of physiological science, and, therefore, of pathological and therapeutical principles, and, as a necessary consequence, of rational practice. However laudable may be their motives, and however they may astonish us with revelations in chemistry, they are, nevertheless, employed in opposition to the experimental results which have been for ever in progress in the organic kingdoms. The enchantments, however, of a fascinating pursuit, and an imperfect acquaintance with those institutions of nature which are entirely foreign to the laboratory, must be allowed as apologies for this. But, an attempt to overthrow the experience of the past, and to obscure what is written in the most legible characters upon the tablets of organic life, by test glasses and crucibles, appears to me to be an enterprise which should alarm physiologists. That we are on the eve of some vast convulsion in physiology, can no more be doubted as a sign of the times, than that the declaration has been promulgated that "medicine is now in its infancy," or that efforts are being made to establish a spurious system upon that assumption. "*Animal* and *vegetable* physiologists," says the able Liebig, "institute experiments without being acquainted with the circumstances necessary for the continuance of life,—with the qualities and proper nourishment of the animal and plant on which they operate,—or with the nature and chemical constitution of its organs. These experiments are considered by them as convincing proofs, whilst they are fitted only to awaken pity." The question then is, whether *animal* and *vegetable* physiologists" will continue to be satisfied with the "experiments and the *pity*" of the *chemical* physiologists? How this question will be decided, I can entertain no doubt if the reader will attentively examine the article on "Poisons, Contagions, and Miasms," in Liebig's "Organic Chemistry," p. 329 to 384; which is certainly the most stupendous exhibition of perverted facts, of combinations of conflicting doctrines, and of the rudest system of pathology and therapeutics, that can be found in the records of dreamy speculation. And yet is Liebig profound and rich in *chemical philosophy*, and its application to the useful arts!

[After all this we have searched the volume of Dr. Paine in vain for one controversion of any fact announced by Liebig, on the score of a mistake in the laboratory.]

LATIN AND GREEK.

From the General Introductory Lecture to all the Courses delivered at the School of Anatomy and Medicine, adjoining St. George's Hospital, Oct. 1, 1842. By R. H. GOOLDEN, M.D., Lecturer on the Principles and Practice of Medicine, and Physician to the Dreadnought Hospital-ship.

THE rank which medicine takes amongst the professions is sustained by the accomplishments of its members, and those accomplishments must be such as can be appreciated by men of general education; but, if it were possible, these should be acquired previously to the regular course of scientific study, and afterwards serve as recreations and relaxations.

All our examining boards demand of candidates a certain knowledge of Latin, and some expect a knowledge of Greek, requiring the student to construe portions selected from medical authors in those languages. If your knowledge of classical literature is to be limited to such requisition, I see little advantage to be derived from it, unless it were a tedious way of acquiring the origin of a few terms of art, or writing directions for administering a draught or bolus. But it has a greater object. The profession is sensible of the high consideration which its reputation for scholarship has achieved for it. It has not forgotten that Linacre, the first founder of a college of medicine in this country, was one of the first who brought Greek literature to Europe, and the first who gave lectures in Greek in Oxford and Cambridge; and that Erasmus testified that the best scholars of his classic age were the physicians of England. It is thought, perhaps, that the study of the ancient languages is likely to turn us away from our professional pursuits; but when we have such examples as Chambers, Latham, and Watson, all distinguished in their universities, and Abercrombie and Pritchard, whose scholastic acquirements have been recognised in those seats of learning, adorning our profession as scientific and practical physicians, shall we not cultivate that character for learning which is a bond between ourselves and the other professions—the link which binds us to the professions of the church and the bar.

But it is not only for the aggrandisement of our profession in the abstract, that it is desirable that each member should have acquired at least a tolerable acquaintance with the languages of antiquity and with their literature. The rustic gait exhibited in the drawing-room is not more awkward than the want of scholarship amongst the educated. It is a failing which no art can conceal, but it shows itself continually in the lapse of some false quantity, some awkward phrase, or some disjointed argument; and what must be the impression made upon the patient's mind, supposing that he has had the common education of a good school, when no term or process of our art can be spoken of but in the mangled Greek, and no prescription written but in doggrel Latin.

I do not recommend, as many have falsely done, the knowledge of ancient or even modern languages, as necessary for your professional knowledge. There are more good books in our own mother tongue upon all subjects connected with medicine and science, than the most industrious of you will ever be able to read. And Hermes, the interpreter, has been too faithful to our patron god Apollo, to leave anything of value inaccessible.

But I recommend the study of languages upon these grounds,—

First, that the study of other languages is the best mode of improving your own. Cicero tells us that it was by the study of the Greek, that the Roman orators were enabled to use the unwieldy Latin for the purpose of expressing themselves in philosophy,—"Nec eum primo eruditum, aptum tamen ad decendum—post autem eruditum." It is by the influence of the Greek literature introduced into Europe, that the barbarous Saxon dialects have become the now polished English and German; and, as an argument for the same necessity amongst ourselves, I might nearly paraphrase the very words of Cicero, in his Tusculan Disp. already quoted. I am more careful in this matter, because many books are said to be written unintelligibly (in English) (Latini) by men who lack scholarship, but otherwise of very high attainments; for it is possible that a man may think well, and yet be unable to express his thoughts elegantly; but for any one to publish his thoughts, which he can neither methodise nor illustrate, nor afford pleasure to the reader with, is an unpardonable abuse of time and letters: consequently the books are neglected by all except a few, who affect to hold all elegance of style in contempt.

Secondly, that the study of language is part of the education of a gentleman—"Honos alit artes, omnes que incenduntur ad studia gloriâ; jacentque ea semper quæ apud quosque improbantur." Honour nurses art, and we are all stimulated to studies by glory; those studies are always neglected which are not held in esteem. The Greeks held vocal and instrumental music as the highest accomplishment, and therefore it is recorded of Epaminondas, who in my opinion was the first man amongst the Greeks, that he played excellently on the flute; and Themistocles, some years before, was deemed ignorant, because he refused at an entertainment to play upon the lyre; for this reason musicians flourished in Greece; music was a general study, and whoever was unacquainted with it was not considered

as well educated. Geometry was in high esteem with them, therefore none were more honourable than mathematicians. For the same reason amongst us I recommend to you the study of languages—the German, the French, and Italian, if you have opportunities and facilities; the Greek and Latin, if you have taste and leisure.

The former will open new means of communication, facilitate you in foreign travel, and afford you many advantages, both general and professional. The latter will improve your style, elevate your taste, and afford you the highest sense of intellectual enjoyment. Of two great nations that in succession have controlled the world, whose civil, moral and intellectual power have filled the earth, whose influence is felt and will be felt for ages, where thought was cradled in its infancy, and taught to speak in written character, its childhood gambolled without restraint, and youth first felt the prowess of its arm, and all its power exerted then in *fêtes* of grace and playfulness—of Greece and Rome: we have in these, sifted through the sieve of time, "the wisdom and the wit, the inspiration and the genius."

Let not the student, at the commencement of his studies, waste his time endeavouring to learn his profession from Greek and Latin writers, but rather let his classical labours be devoted to general works of taste, history, and philosophy; and when he has become *acquainted* with his art, he may read with interest and instruction the works of such men as Hippocrates, Aretæus, Galen, and Celsus, not as his guide in science or in practice, but as examples of what had been done in medical knowledge by the unassisted powers of strong mind and acute observation, unaided by the light of science, and at the same time unprejudiced by opinions and controversies which perhaps unconsciously always influence more or less the judgment of the modern physician.

But we may learn even something more from these ancient writers, and especially from Hippocrates; his writings are in the most elegant Ionic Greek, and from them we may trace the high moral tone of thought and action which characterises the true physician, as opposed to the mean and mercenary spirit of the medical pretender. We admire the grand intellect patiently searching for the materials of its philosophy amidst poverty and disease, and recognise the dignity of the philosopher refusing invitations to the courts of kings and princes, but spending his time at the cemetery and lazar-house, watching the plague, tending the wounded, and instructing others to assist him in his labours. From him we learn the claims of our medical brethren upon our willing and gratuitous services; from him we learn to measure our success by the relief we afford rather than by the emolument we receive; and the laurel crown which the Athenian people placed upon his venerable brow graces even now the memory of *his* immortal name, whom we still regard as the benefactor of our race and the father of physic.

ONE HUNDRED GUINEAS REWARD,

For a literal translation into *English* of the following passage from the Greek of Mons. A. Bureaud Riofrey, M.D., editor of "A Dilation of Quacks." Or Fifty Guineas for a free translation; to wit:—

"Ah! too confiding public that hath necessitated our curation! As we repose beneath the shade of our wigwam and inhale contemplation with the exhilarating weed from the haft of our native *argument*, the fumes that curl from its iron head too plainly symbolise the basement of thy faith; and the gravity of our impulsion is scarcely restrained to the appointed time, that shall alike dispel thy delusion with the case that we puff away the more honest and faithful cloud."

Similar rewards will, on the other hand, be given by the Professor of English at King's College, Strand, to the candidate who, with the best success, puts into *Greek*, literal or free, the subjoined lucid panegyric, by Mr. John Simon, author of a recent pamphlet on Medical Education, p. 33 thereof, to wit:—

"I cannot refrain from making especial reference to the works of my honoured friend, Mr. Green; who has illustrated all topics of medical polity with consummate judgment and mastery. It would be ill-suited to this occasion, should I allude, except *most glancingly*, to Mr. Green's *other labours*,—to his profound æsthetical Discourses before the Royal Academy, to his magnificent Oration and Essays concerning vital dynamics,—or to his most high character; and I now for a moment adduce them, only because—in my belief—*they* at once prove *and constitute* his eminent *qualifications* and *ability* for representing, as he has done, the functions, *ideal form*, and ultimate aim of the profession, and the *conditions of its excellence and efficiency*. The works, to which I particularly refer, are: 1. An Address, delivered at the commencement of the Medical Session in King's College. 2. Suggestions respecting Medical Reform; and, 3. The Touchstone of Medical Reform. Their tone of *earnest philosophy*,—ever appealing *beyond the local, ephemeral, and relative, to all which is ultimate and absolute*,—(while *it* reminds one of that ennobling *charge*, which Tully wrote against the least time-serving of his countrymen—*dicit tanquam in Platonis republicâ, non tanquam in fæce Romuli, sententiam*)—raises them far above the sphere of temporary and occasional interests, into *the permanent dignity of a system of professional ethics*.—London: printed by G. J. Palmer, Savoy-street, Strand."

THE LANCET.

London, Saturday, October 22, 1842.

If the conductors of public journals were to refrain from performing all tasks which are of a disagreeable description, they would execute few duties that could be of use either to their readers or the community. That there are pleasing occupations in journalism cannot be denied; though that there are others which are irksome, and some which are of an odious kind, must also be admitted. But if, in regarding the entire duties of a public writer, it should so happen that his reflections and convictions assure him that he has laboured with impartiality, and sought strenuously to fulfil the obligations which his self-imposed task has involved, a freedom from self-reproach may not be the only reward of an honourable execution of his trust.

In discussing the obnoxious tendencies of *systems*, it constantly happens that the pen is necessarily directed against *individuals*, and in all such cases personal references are deemed by the unwise and the over-generous to be uncharitable. If, however, the illustrations which individual character can furnish were not adduced as proofs of the defective nature of *systems*, we strongly suspect that the latter would be seldom overthrown, whatever might be the denunciations which are levelled against them. *Systems* of government, control, and management, have too often their foundations in ignorance and corruption, and, being generated and fostered in such loathsome soils, they rapidly and continuously produce fruit of a truly appropriate description. If the medical institutions of this country were founded upon a rational basis, if the principles which regulate their government were sound, we should only have to give activity to those principles by an appropriate arrangement of *details*; but now *all* is defective; there are no just principles of government in operation, no systematic, well-methodised *arrangements* which can reflect renown upon the professional character, or promote the health and welfare of the community. We are speaking of what is known to every student. But do the "heads" of the profession, as they are stupidly denominated, enter into strong and powerful combinations for the purpose of establishing the operation of new principles of election and management in our medical colleges and hospitals? Nothing of the kind is to be heard or seen. Slothfully and negligently do they witness the foul workings of the rotten system of which they form a part; and indifferently do they gaze on it, while their professional brethren and the community alike suffer from its pernicious effects. Such men deserve no forbearance. The pen of criticism cannot be directed against them too forcibly or too perseveringly. If they shrink from the ordeal which such an attack entails, let them retire from the posts that they so unworthily fill. But if they continue to court public observation, by still occupying prominent positions before the public, they ought not to be surprised if there falls upon them the frown of an indignant profession, or the reproaches of an injured community.

On tracing medical abuses and defects, on referring to imperfect medical laws and ill-organised medical institutions, some persons may doubt and hesitate when called upon to pronounce an opinion as to the chief source of the calamities which a large number of medical practitioners are so loudly condemning. Some allege that the fault is to be discovered in Parliament; others declare that it is to be found in the supineness and neglect of the Executive Government. Again; with regard to the hospitals, many medical reformers insist that it is owing to the governors that such institutions are so badly managed. Having weighed the whole of these asseverations with due care, and having, as we believe, patiently and thoroughly investigated the entire subject, we long since formed the opinion that the main

source of all our professional grievances and defects was to be found in the profession itself. There is a want of unity of purpose in the professional body; there is an absence of combination for great objects; there is a listlessness amongst surgeons and physicians which, it must be confessed, has hitherto been fatal to the rapid progress of a just and noble cause. Assuredly, the power which an union of twenty thousand medical practitioners could exercise over the Legislature of the country in which they live, has never been sufficiently considered or investigated. Equally certain is it that Parliament has not bestowed *any* attention on this subject, with a view to the benefits which a just and rational organisation of such a number of enlightened men could confer upon society. Thus, there are reciprocal, radical disadvantages perpetually operating upon each other. The *profession* neglects its duty; *Parliament* neglects its duty; and the weight of these evils is enormously increased by the patient indifference of *the community*.

In exhibiting the causes of our calamities, we at once point to the certain and inevitable means of cure. It remains to be seen whether prompt and appropriate remedies will be employed. The members of the profession must prescribe for themselves, vigorously, or nothing salutary will be done. Would to Heaven that we could *shame* them into activity, and stimulate them, by exciting in them a feeling of self-reproach, to free themselves from the scandal of seeing so many men of inferior minds in the profession occupying such exalted offices. If the list that we are about to record comprises the names of the "HEADS" of the profession, what must be the *members*, the *inferior extremities*? Against the leaden ponderance which belongs to such a load of dulness, the present scattered and uncombined intellects of the profession operate with as little effect as would unresisting air. Almost every fresh election to our hospitals, almost every new appointment in our Colleges, carries with it additional disgrace to the profession. Still, medical practitioners slumber, or engage in trifling and insignificant disputes, in their parti-coloured Associations, whilst the great principle of REPRESENTATIVE GOVERNMENT, in a National Faculty, invites them to be active, enterprising, and resistless, in making a just and rational appeal to the Legislature. Although the systems which lead to personal elevation in the Church and at the Bar, are, without doubt, sufficiently defective, still, it seldom happens that a man of weak intellect, or inconsiderable acquirements, succeeds in either, in obtaining a distinguished office. If such a person *be* promoted, he constitutes an exception, and his elevation forms no part of the rule that governs the promotions in general. In the appointments which are connected with the surgical department of *medicine*, these orders appear to be completely reversed. Students and young practitioners of first-rate capability and acquirement are cast aside, to allow of a preference being shown to such an ordinary description of persons as those whose names are subjoined, a catalogue exhibiting the names of the SURGEONS OF ALL THE LONDON HOSPITALS:—

Mr. LUKE.	Mr. FERGUSSON.
Mr. TUSON.	Mr. GUTHRIE.
Mr. SOUTH.	Mr. B. COOPER.
Mr. BABINGTON.	Mr. S. COOPER.
Mr. LYNN.	Mr. HAWKINS.
Mr. AVERY.	Mr. WALKER.
Mr. HANCOCK.	Mr. GREEN.
Mr. PARTRIDGE.	Mr. STANLEY.
Mr. SCOTT.	Mr. VINCENT.
Mr. ANDREWS.	Mr. QUAIN.
Mr. MORGAN.	Mr. TYRRELL.
Mr. ARNOTT.	Mr. KEY.
Mr. WHITE.	Mr. LISTON.
Mr. MAYO.	Mr. LAWRENCE.
Mr. KEATE.	

With the exception of three or four, is there to be found in this list another name which is known as that of a surgeon who has obtained reputation for his acquirements, for his skill as a practitioner, for his discoveries in science, or for his contributions to medical literature? This proposition is not put forward invidiously. It is stated with a view of serving a good purpose; namely,

that of directing the attention of the medical students of this metropolis to the astounding fact, that the most important medical offices in London are acquired by family influence, by intrigue, by patronage, and even by *purchase*, and that scarcely any one of them is to be obtained by *merit*. The exception last named is to be found in University-College Hospital; and even there the system of appointment, or election, is anything but perfect. When the names of LISTON, KEY, LAWRENCE, and one or two others, are taken from the above list, we find remaining those of very ordinary, though not altogether very unpretending, men, as the example of GEORGE JAMES GUTHRIE fully testifies. Nothing can be more useful than to bring the names of such personages in juxta-position with the important offices that they fill, and with the little which such persons are doing, or are capable of doing, in connexion with the profession.

The system which leads to the elevation of such men is rotten to the very core. It not only offers rewards to presumptuous ignorance, but it holds out constant inducements to dishonesty. Witness the career of WILLIAM LAWRENCE. Endowed, naturally, with an extraordinary facility of acquiring and retaining knowledge, possessing, in his youth, a bold and daring spirit, challenging and combating many of the absurd dogmas of the schools, disputing, at an early age, with some of the experienced master minds of the day; where is he *now*? What has he become? To what uses is he lending his faculties? A quiet, supple, submissive Councillor of that College which he had so often, and so publicly, denounced! The demoralising character of the present system is one of its worst features. Instead of holding out a hope of reward to students of high and intrepid minds, it promises success only by the most vulgar and mean inducements. It is really marvellous that the profession should have sustained its reputation with the public under such a load of degrading causes. Nothing but its sterling worth, its known utility, and the very great benefits which it is always conferring upon the community, could have enabled it to resist the influence of such a depressing agency. That distinguished men have formed portions of this system cannot be questioned, but such results were not anticipated. The production of brilliant intellects, or striking discoveries, were not the objects sought after by many of the speculators for surgical offices. It is not the *student*, but the *parent*, or the *guardian*, who weighs the chances of success. Of what success? Thriftiness in *making money*,—precisely the view which WILLIAM LAWRENCE must now be taking of the profitable achievements of his own career. In his brighter days this very man referred to his own case as a happy illustration of the infamy of the system. "Why," said he (and he cannot have forgotten the words), "my uncle, an old cheese-"monger, had the sagacity to pay *five hun-*"*dred guineas* for putting me apprentice to "one of the surgeons of St. Bartholomew's "Hospital. So that if it had not been for "the sagacity and the *money* of a venerable "*cheesemonger*, I could have had no chance "of obtaining a distinguished office in this "metropolis." Is this system altered? Is not the money of the *old cheesemonger* just as influential as it was thirty-five years ago? Aye, truly, is it; and there are WILLIAM LAWRENCES to be bought and sold by it, *now* as *then*,—offices to be procured by it, merit to be crushed, and genius to be clouded,—to the dishonour of the profession be it spoken!

We have not placed the foregoing list of names before the medical students of England without having a practical object in view. We call, therefore, upon the young gentlemen who are required to pay for attending lectures, out of number, to read over that list, again and again, and to fix the names which it contains firmly in their memories. Having done so, let them next ask what discoveries had such men made, what abilities had they displayed, to obtain for them the offices of surgeons of the great endowed hospitals of the metropolis,—of hospitals possessing incomes which enable the go-

vernors to alleviate every year the sufferings of thousands of their fellow-creatures? MOLIERE was in the habit of testing the fitness of his works for the public ear, by the approval or discouragement which they received from an ordinary old woman. Tried by such a test as that, nothing, assuredly, can be more perfect than is our system of hospital election and patronage. It lives, and flourishes, and has long been maintained, by whole batches of ordinary old women. Instead of opening the doors of the hospitals to men of great abilities and exalted merit, the governors, by their regulations, allow the practice of *buying* the most important appointments in those institutions by means of the sums which are paid in the shape of PREMIUMS FOR APPRENTICESHIPS. The money hoarded by venerable "cheesemongers" is still doing its dirty and iniquitous work, and in every hospital there is a herd of VINCENTS, young STANLEYS, young COOPERS, and young SOUTHS, who are destined to obtain *every office in the hospitals*, by seniority, and the surgeons, themselves, of each hospital,—the London University College Hospital always excepted,—invariably enter into a combination for the purpose of securing the appointments upon that nefarious principle.

How long shall the practice last? The answer is brief:—

WHILE THE PROFESSION SLEEPS.

A LESSON IN PAIN.

SUCH a letter as the following, addressed to the editor of one of the daily papers, was well calculated to excite public attention:—

HORRID CRUELTY.

Sir,—I need urge you only on the score of philanthropy to insert the following.

Passing through Leadenhall-market on Friday, my attention was excited by a group of lookers-on, when, to my horror, I beheld a man and two boys stripping the feathers from three live fowls. On one they had just commenced the cruel operation, the poor creature struggling in all the vigour of life; a second was partly plucked, but kicked so hard as to draw from its tormentor harsh expressions; the third, though quite naked, still wrestled between life and death. Is this outrage to be winked at, because the plumage is more easily stripped than when the bird is cold and dead? Where are the spies of the "Humane Society?" In a day of so much boasted sentiment such spectacles should not be tolerated.

J. W. WALLIS.

Wilmington-square, Oct. 4.

Soon afterwards the subjoined report appeared under the head of police intelligence:—

MANSION-HOUSE. 1842.

William Darling was charged with having plucked the feathers from a living fowl in Leadenhall-market.

Thomas Gibbins, inspector of the "Animals' Friend Society," said that having seen in the *Times* paragraphs complaining that persons had been seen plucking live birds, he walked round the market, and saw the defendant pluck three fowls, which were to all appearance alive; one of them raised its head and fluttered; but he took care that I should not examine any of them.

Mr. Howard: My lord, allow me to question this man; we are particularly interested in this subject.

The Lord Mayor: Certainly you shall.

Mr. Howard: Were their necks broken at the time?

Witness: I do not know; but one of them drew up its legs and wings during the plucking.

A policeman stated that he saw the fowl when three parts plucked draw up its legs and flutter. I examined it after it was plucked, and saw that the neck was broken.

Mr. Howard: I employed the defendant, and saw the fowl killed. We always have their necks broken before a feather is taken from them; and after the spine is injured, according to medical men, pain is out of the question, although there may be a muscular movement.

The Inspector said that scarcely a moment elapsed between the taking of the fowls out of the basket and the plucking, so that the inference was that they were plucked alive.

The Policeman: The necks were certainly broken.

Mr. Brooks, a salesman in the market, said, that the correspondent of the *Times* was in error, and he trusted that the positive assurance made by the most respectable butchers, that there was no real foundation for the report, would be attended to. They had already been called monsters and brutes, in consequence of the paragraphs.

The Lord Mayor said he was sure, from the respectability of Mr. Howard and Mr. Brooks, who voluntarily appeared to vindicate the practice of the market, that the case was exactly as they represented.

Mr. Brooks: The practice has existed for ages, I dare say as long as fowls have been brought to market. We have long ascertained that with the breaking of the neck all pain is at an end.

The defendant was then discharged.

Mr. Hobler said the noise that had been made about the plucking would do no harm at all. He knew perfectly well that the respectable butchers would not countenance such a practice as was suspected, but he believed there were some who would pluck without taking the trouble to break the neck at all.

Many of those things in the daily events of life which were formerly only surmised to be true, have now become well established facts, and portions of important branches of science, as the department of physiology, for instance, veritably witnesses. The above investigation strikingly makes known to the popular mind the most quick and humane mode of removing life from those animals which are designed by nature for our subsistence. What Mr. WALLIS and the Inspector of the Animals' Friend Society *saw*, when the former observed the fowls "struggling in *all* the vigour of life," and the latter noticed that "one of them raised its head," was something more than could possibly be visible, the neck of the bird being broken. So much for the testimony of the eyes. "I saw it myself," says the mesmerist. Once again,—in Mr. WALLIS's fable of the fowls, we are warned "to believe *nothing* that we hear, and only half what we *see*."

The "excito-motory system" has become matter of public as well as professional interest.

MEDICAL SOCIETY OF LONDON.

THE EXCITO-MOTORY SYSTEM.

THE society has been occupied during three meetings with a paper and discussion on the excito-motory system. The paper, an able and lucid exposition of the entire system, was from the pen of the president, Mr. Pilcher. In the long report forwarded to us, the paper and discussion are fully given, but press of matter will not enable us to afford space for its insertion. We regret this the less, because the subject has already occupied the pages of THE LANCET on several occasions. The discussion was chiefly on points which, though they bear not directly, perhaps, upon the system of Dr. Hall, are nevertheless connected with it as a portion of the nervous system. Thus, much time was occupied by discussing the specific function or power of the grey matter. Some dispute took place also as to the true limits of the excito-motory system: it was thought by some that the subject was not one fit for discussion at a medical society, whilst others considered it eminently practical, and most worthy of being debated upon. In illustration of its practical utility some cases were cited, among others two of tetanus, in which by division of the nerve in immediate connection with the part affected, by cutting off the communication with the spinal cord, the constitutional symptoms were in one case immediately, although only temporarily, relieved; and in the other instance completely and permanently removed. Some of the speakers thought too much influence had been attributed to the spinal marrow; and others mistaking the views of the author, and of the founder of the system, argued upon a wrong basis, and were set right. All this occupied much time, pleasantly, no doubt, but we fear not so profitably as it might have been. We publish some practical remarks of Dr. Marshall Hall on the subject, which, in fact, embrace some of the disputed points, and furnish an epitome of the discussion.

Dr. MARSHALL HALL opened the discussion by complimenting the author on the popular and lucid view which he had laid before the society of the interesting subject he had brought before them. From the many topics which he had noticed, he (Dr. Hall) would select one or two in which he did not concur with the author, in order to open the way for discussion. The first of these was that maintained by many physiologists, including Mr. Grainger and the author, that the grey matter was, in every instance, the source of power in the nervous system, whilst the white or fibrous performed the office of a conductor merely. He (Dr. H.) had never seen sufficient grounds for this opinion, and he thought there was one fact which refuted it entirely. If we sever a muscular nerve from its connection with the nervous centres, and irritate it by a needle or the forceps, the muscle or muscles to which it is distributed are excited into contraction. Now here is power, the excitor power. To say that the impression is conveyed along the nerve is to assert a fallacy; for the puncture, the pinch, is that impression, and this is *not* conveyed along the nerve. On the contrary, some power,—some *vis nervosa*,—is called into action, and this power does extend along the nerve to the muscle. Yet the nerve contains grey matter. In short, power is present, no grey matter is absent. This, therefore, appears to be an experimentum crucis.

Another point to which he would advert, is that of the part acted in walking by the excito-motory property and function. Too much had been attributed by the author to the agency of this property in this case. The mind, it is true, might be fully engaged in other thoughts, or trains of thought during walking. But so it might during the per-

formance of a piece of music. Yet each key of the piano was pressed down by a distinct act, not of the excito-motory power, but of volition. Nevertheless, as in the celebrated case of the ostrich, the head of which was struck off by a crescentiform arrow by the Roman emperor, the contact of the sole of the foot with the ground, no doubt, did prove an excitant, and had its share in inducing the successive acts of the limbs in progression. It was essential, however, to the safety of the doctrine to restrain its application within just limits, which he (Dr. Hall) found had been overstepped in this instance. He remarked, that the excito-motory doctrine did by no means depend on the anatomy. Physiology had its own facts, its own evidence, irrespective of those afforded by structure, which might or might not, for the present, afford its corroboration of the doctrine founded on those facts. If we remove the head of a frog, for instance, and irritate a limb, movements are immediately induced. If we now remove the spinal marrow, these phenomena cease. Now these facts are solid, as if the terms grey and white matter had never been uttered by the human voice. On such facts the excito-motory doctrine is based. The doctrine has proved as stable as the stable basis on which it is founded. It is only necessary to restrain it within its own province. That province is extensive enough both in relation to physiology and pathology; it embraces all the acts of ingestion and of egestion in the animal economy, acts never explained before, and the class of spasmodic diseases.

After some further discussion, in which many points were mooted, and many misapprehensions explained away,

Dr. HALL rose and said, he thought it particularly desirable that the term excito-motory system should be limited within the bounds which he himself had assigned to it. This was but just to himself. For otherwise, objections might be raised which did not apply to his use of the term, but to the more and more extended use of that term by others. Now he (Dr. H.) had always limited the designations of "the excito-motory system," "the reflex action," &c., to the true spinal system, the systems of the acts of ingestion and egestion, inclusively of the cerebral on the one hand, and the ganglionic on the other, and he would say that the members of the society would, for the sake of truth and accuracy, do the same; otherwise there would be nothing but confusion and endless disputes, instead of profitable discussion. Besides, nothing would be more natural in itself, as well as essential to just views of the subject, than the divisions which he proposed. We may witness the phenomena of a perfect infant; the cerebral, the true spinal, the ganglionic functions, are all perfect. We may watch the phenomena of an encephalous fœtus; in this case the cerebral functions are entirely absent; there was no sensation, no voluntary motion; the true spinal and the ganglionic exist together, but alone; respiration is continued, but it wants the equability which is conferred by the cerebral influence; all the acts of ingestion and of egestion were performed well enough. Lastly, we may examine a fœtus, such as that of which he (Dr. H.) presented a picture to the society; it was amyelencephalous; that is, it was without both cerebrum and the true spinal marrow; it was incapable of an extra-uterine life; not an act of ingestion or of egestion was accomplished; all was interior and ganglionic. If there were no other evidence of the distinctness of the three divisions of the nervous system, these facts, though but as it were *lusus naturæ*, would be sufficient. Let us not proceed to confound them again, either by including in the excito-motory system phenomena which in reality belong to the cerebral on the one hand, or to the ganglionic on the other. It will be easy to devise other terms if we wish to speak of either of these. In the same manner he (Dr. H.) would observe, that the question of the respective offices of the grey and white matters of the nervous system had nothing to do with the doctrine of the excito-motory system, which was established on its own basis, that of experiment and physiology. Dr. Hall thought these respective functions not yet made out. They existed undoubtedly, but they had not, he believed, been shown to be the seat and the conductor of power respectively. The experiment of irritation of a muscular nerve isolated from the cerebrum and spinal marrow, but in connection with its muscles, he had already adduced as the experimentum crucis; there was power, but no grey matter. For to say that the nerve conducts the impression is illogical and untrue; the impression is a puncture, or a pinch, according as a needle or the forceps may be used. Is this conveyed? Is the puncture, is the pinch, conveyed? To give either another name, that of the impression, for example, and to say that this is conveyed by the nerve, is a piece of self-deception, illogical, and untrue. No. Nothing is "*conveyed*." But the *power*, the *vis nervosa*, the inscrutable nervous power, unknown except in its effects, is *excited*; and this excitement is extended, like the power of an electric conductor, or of a galvanic wire, to use a vague analogy, to the muscle or muscles, which it excites into contraction. In fine, thus we have nervous power without grey matter. But (said Dr. Hall) I pass on to what is far more agreeable to me, viz., to notice those points in which we are agreed, which are, indeed, all, except the two to which I have adverted. Very early in this inquiry, and when the excito-motory system was a sort of *pons asinorum*, my friend and pupil, Mr. Barlow, Mr. Le Gros Clark, Professor Müller,

and finally, Mr. Grainger with yourself, gave the subject the sanction of their approbation, and greatly promoted its acceptance with the profession. I never can cease to feel grateful to these gentlemen. I feel the same debt of gratitude to a gentleman who is not of our profession, but who occupies the first rank in science, and is the worthy successor of Sir Humphry Davy, Mr. Faraday, who, in a most lucid lecture at the Royal Institution, first made the true spinal system acceptable amongst philosophers.

But the merit which I would claim especially for the true spinal system (so I prefer to term and consider it), is precisely that which has been desired by our veteran member, Dr. Clutterbuck. It has, indeed, been justly asserted by an able professor (Dr. Sharpey), that we cannot now pass along the wards of an hospital without being continually called upon to apply our knowledge of this system to the cases before us. Do we witness a case of apoplexy, or of injury of the brain, or of hydrocephalus? Do we witness the sinking of the vital powers in typhoid fever, or exhaustion? Do we require a diagnosis between cerebral and spinal disease? A knowledge of this system has become as it were our stethoscope, and it is by its means alone that we can proceed in our clinical inquiries. But this day I have witnessed a case of epilepsy, succeeding to hemiplegic symptoms. The disease is no longer confined to the brain; its influence is extended to the spinal system. How could we trace the course of this terrific malady without a knowledge of the latter system? Every day the question comes before one, Is the case cerebral or spinal? Is it one of the nervous centre, or is it one of incident nerves? &c. &c. In fine, I cannot understand those gentlemen who assert that the subject is not a practical one, and specially fitted for the consideration of *this* society. Is *diagnosis* practical? Is it not our first step in actual practice? Is it not the foundation for our prescription? Thus is a knowledge of the true spinal system practical. Without it diagnosis is imperfect; and without diagnosis our practice is but a feeble and empirical system of symptomatising.

HOSPITAL SHIPS AT SEA.

PLAN OF ONE FOR THE COAST OF CHINA.

THE *Minden*, a line-of-battle ship, has been wholly appropriated as an hospital on the coast of China. Mr. Prior, surgeon of her Majesty's yacht William-and-Mary, in a letter to Sir William Burnett, in the "Edin. Med. Journal" for October, speaks in high terms of this measure, from having personally experienced the difficulty of treating obstinate disease with advantage in a single-decked ship actively employed in general service, whose deficient resources for meeting the contingencies that continually occur are unavoidable, and whose officers looking, naturally, to the fighting efficiency of their decks, are unwilling to appropriate the best situations for the sick until driven to the last extremity. The *Minden* is fitted with all that can be supposed calculated for the preservation of life, and the prevention of suffering. No English armament should ever be dispatched without so useful an attendant. She forms a safe hospital, rarely in danger of interruption from an enemy. She is placed in no jeopardy, such as the miseries of retreat before a superior force. She may make a depôt for medical officers and stores, ready for any quarter. She comprises more comforts and accommodation than military hospitals on occasional expeditions commonly possess. She chooses without disturbance to patients the most favourable position for health, receives casualties as they occur, and renders the fleet more efficient, by clearing it of the disabled. In the late Syrian campaign, such a vessel would have been invaluable. All private accounts are loud in lamenting the want of such an appendage for saving lives there; for in several ships men were dying from disease within a few yards of the guns roaring in action; while the want of accommodation in others for the injured and diseased gave rise to scenes which it would be painful to detail.

The *Minden* is a 74, deprived of one tier of guns, to make more room for the sick; roomy; well adapted for her new employment; and commissioned as a fifth rate, with 280 men, fitted for 200 patients, and ventilated upon the plan of Dr. D. B. Reid, who went to Plymouth, where she was fitted out, to make the necessary arrangements.

The hospital establishment consists of one inspector of hospitals, one surgeon, five assistant surgeons, one surgeon's clerk (having large supplies of medicines and stores, and being accountable for their distribution); one ward-master (in lieu of matron); sixteen landsmen as nurses; three washers (men's wives), besides servants to the medical officers. Medicines, surgical instruments, washing machines, portable water closets, cradles (of iron), are fitted with rods to prevent the sick being thrown out in stormy weather; light screens to prevent currents of air on deck where ventilation is so necessary, baths, and books for the perusal of the patients.

The supplies in charge of the purser, to deliver daily on the requisition of the surgeon, are said to be about 70,000 lbs. bread and flour; 55,000 beef; 7000 Scotch barley; 5000 salt; 9000 vinegar; 1500 of tea; 8000 of sugar; 400 gallons of wine; 6500 lbs.

of soup and bouilli; 2000 quarts of gravy soup; 1000 lbs. calves'-feet jelly, all adapted for hospital diet, and one ton of patent preserved potatoes.

UNIVERSITY COLLEGE HOSPITAL.

CLINICAL LECTURES AND PHYSICIANS' ATTENDANCE.

To the Editor.—Sir, In the last number of THE LANCET is a paragraph referring to the medical clinical lectures at University College Hospital, and containing by implication a double misstatement, which I have no doubt you will immediately correct. The paragraph in question implies—First, that since the appointment of a special professor of clinical medicine the other physicians to the hospital have ceased to deliver clinical lectures as before; and second, that the professor of clinical medicine lectures upon cases treated by the other physicians, and not upon cases under his own care. Now both these statements are exactly the reverse of the truth: Dr. Williams and Dr. Thomson both lecture on their own cases, and lecture as often as they did before Dr. Taylor was appointed. Dr. Taylor also lectures upon those cases only which have been under his own care, so that his lectures, instead of being a substitute for those of the other physicians, are so many added to them; and this additional number amounted last year, I believe, to sixty.

There is another inuendo in the same communication scarcely less unjust than those I have disposed of: it is stated that the physicians are "pretty" regular in their attendance, leaving it to be inferred, I suppose, that they are not so regular as they should be. Now I confidently challenge your informant to point out any instance of irregularity on the part of any of the physicians, or to show in what manner they could do more than they do at present. I authenticate this communication by sending you privately my name; and am, Sir, your obedient servant,

A PHYSICIAN'S PUPIL OF UNIVERSITY COLLEGE HOSPITAL.

ST. GEORGE'S HOSPITAL, OCT. 14.

A CORRESPONDENT, whose letter is thus dated, writes as follows:—

I read with pleasure the letter of "AN OLD STUDENT," in the last LANCET, and take upon myself to address you as a *young* student, but who, having been quite long enough there to comprehend the great mismanagement of the anatomical school, can bear witness to the truth of all that is stated by the older student, who, if he were in Kinnerton-street at present as much as I have occasion to be, could have informed you of many more abuses. The absurdity of appointing three students to act as "prosectors" is so manifest, that I am sure it cannot last long. The noise in the dissecting-room, from the disputing between the "dissectors" and the "prosectors," about the different situations and uses of minute parts of the body, is so great that it is impossible for any student to study who may be inclined. The prosectors cannot command that respect among the pupils that is necessary between teacher and scholar, and therefore they do more harm than good. As to Mr. Sayle, he is a harmless fellow, not often accused of having two ideas in his head. Respecting the lecturers I have a word to say on this occasion. Mr. Tatum is a gentleman, in every sense of the word, an excellent surgeon, and a most persevering teacher. One who considers more the welfare of the students could not be found. Mr. H. C. Johnson is not surpassed as a demonstrator by any other in town, and the desire he ever evinces to make the pupils fully acquainted with anatomy, cannot but excite deep gratitude in them. But now I come to one who, though named last, is not the least, at any rate in his own estimation. Instead of eloquently teaching us the physiology of the several parts of the body, he launches into long harangues, quite unconnected with the subjects before him, and filled with vulgar allusions, the offspring of a most vulgar mind. For instance, "As Tom *Wack*ley says;"—"The tottle of the whole," as Joe Hume says;—"Women sit wide, as any one knows who rides in a buss;"—"Poor Maria sat upon the po, and * * * breaking, dislocated her coccyx," and such like trash, that amuses a few gaping blockheads, who sit grinning with their graceless mouths open from ear to ear. I allude to Mr. James H. Johnson. The school, in short, requires in very many respects a thorough reforming, and until this takes place it must fall away, gradually. I have the honour to remain, Sir, your obedient servant,

A STUDENT AT PRESENT AT KINNERTON-STREET.

NOTE FROM MR. REEVES.

[THE following reply is short enough to induce us to find it, as a final communication on the subject, a place in our columns.]

To the Editor.—Sir, With this terminates my communications upon a disagreeable subject, and I beg you will give it insertion: first, because I exposed the case for the public good (disregarding the misrepresentations of my conduct which might ensue); and, secondly, because the circle of argument will not be complete without it. I regret ever having had occasion to trouble you with any of my professional grievances;

but if our profession had other efficient means of preventing professional improprieties, you never should have heard from me concerning *the case* of cystectasy. Allow me to thank you for inserting my first letter. I have enjoyed comparative freedom from undue interference since. I cannot congratulate Mr. Elliot on his friends, whom he wished to show that I was on intimate terms with,—having helped him entirely out of his difficulty. I could enumerate the minutes during which I ever was in the company of Dr. Cartmell. And how Dr. Tinniswood can imagine that, before signing the document, he was prepossessed in my favour, I cannot conceive; for I, as well as others, told him that the boy's statement which he was about to sign, in favour of Mr. Elliot, was contrary to fact. Had he been a friend of mine, would he have signed it? Of Dr. Jackson, I knew little; and leave the public to judge whether I have suffered any reproach (which Mr. E. wishes to insinuate that I have) by Dr. J.'s declining my acquaintance. The boy had consulted Mr. E. before the latter sent for his father; but by what means Mr. Elliot first obtained the boy as a patient is already before the public. And, at last, he offers as his excuse for having enticed the patient from under my care, that I never intended to operate. I have before shown that I did fully intend so to do. I remain, Sir, your obedient servant,

W. Reeves.

Lowther-street, Carlisle,
Oct. 17, 1842.

PROTRACTED SUCKLING.

Mr. Orwin, of Worcester, publishes a case of epilepsy, from protracted lactation, in which the suckling was continued for the unwarrantable period of three years and a quarter. The woman was twenty-seven years old. The worst symptoms of debility at last attended the monstrous proceeding, and several fits of epilepsy were experienced. With great difficulty only was she persuaded to wean the child. The fits became less violent then, and, the pain in the head being reduced, the citrate of iron was afterwards given, and recovery ensued.

SLEEP.

The hitherto secret plan of Mr. Gardner, calling himself the "hypnologist," now published by Dr. Binns, is as follows:—Let the sleepless person turn on his right side, place his head comfortably on the pillow, so that it exactly occupies the angle which a line drawn from the head to the shoulders would form, and then, slightly closing his lips, take a full inspiration. The lungs are then to be left to their own action, that is, the respiration is neither to be accelerated nor retarded. The attention must now be fixed upon the action of respiration. The patient must depict to himself that he sees the breath passing from his nostrils in a continuous stream, and it is alleged that the instant he succeeds in doing this, he falls asleep!

CROTON-OIL PLASTER.

A plaster, used by Chomel, at the Hôtel Dieu, is thus prepared:—Melt four parts of diachylon plaster, at a very gentle heat, and while half liquid, mix one part of croton oil with it. Then spread the mixture in a thick layer on calico. Apply pieces cut from this to the skin, like ordinary sticking-plaster. They quickly produce an active irritation.

POISONING WITH ARSENIOUS ACID.

Its treatment by the tonic and stimulant method, latterly so much praised by the school of Rasori, has been lately tested by one hundred and thirty-six experiments, which justified the conclusions drawn by Orfila in 1840-1. Twenty horses were poisoned by arsenious acid in presence of a Paris commission, and subjected to the stimulant plan of treatment, all of whom died in a very short time. This result, says Orfila, is too important not to be known to those who still accredit a mode which cannot bear the slightest examination.

CREOSOTE IN SEA-SICKNESS.

Dr. Cormack, of Edinburgh, had an opportunity of seeing its effects when going from Edinburgh to London by sea. A gentleman was leaning over the side of the ship, very sick, beside whom was a bottle smelling strongly of creosote. He was a great martyr to sea-sickness, and had been advised to take the creosote mixture; but it had had an effect directly the opposite of what was intended. On the first dose he was seized with retching. Upon the following day the gentleman became exceedingly sick. In desperation he applied again to the reputed specific, when the very same dose that had on the previous day made him squeamish, on this trial almost entirely relieved him. *It is worthy of remark* (says Dr. C.) *that creosote, though excellent in allaying vomiting, often excites it when it does not exist.* Vomiting is caused by creosote very frequently where the dose is too large.—*London and Edinburgh Journal.*

SPUTA OF PHTHISICAL PATIENTS.

M. Sandras has selected from the Hôtel Dieu forty-nine patients in whom phthisis was well marked, collected their sputa, and submitted it to a microscope of 300 diameters, and he believes that the expectoration is quite different from that given off by the lungs in other diseases, and that this mode of examination will materially assist the diagnosis of this disease by the stethoscope. The expectoration consisted of round globules, separated, greyish-white, and similar in size and form to the globules of pus, but that the

former are surrounded by a kind of rough layer, which it is impossible to remove by washing. They are also opake in the centre, but gradually clearer towards their border. But he observes that the sputa of all phthisical subjects is not similar, invalids being in general affected at the same time with bronchitis. M. Sandras was unable to discover such globules in tuberculous abscesses in other parts. Cases are occasionally met with in which it is difficult to decide whether the disease is phthisis or bronchitis.

PNEUMONIA IN CHILDREN.

THE frequency and fatality of pneumonia in childhood, as contrasted with advanced life, form very interesting subjects of consideration. The following extracts from a report of the registrar-general of deaths, throw an important light on the subject. The deaths of the metropolitan district are divided into three classes—those under 15 years of age, between 15 and 60, and above 60. One table is a return for each of five weeks in January and February, 1840. Under "pneumonia" the total of these weeks is as follows:—Under 15 years of age, 257; from 15 to 60, 73; above 60, 30. How far this remarkable difference is owing to a less energetic treatment it is not easy to say, but I fear that a false tenderness in treating the disorders of infancy mildly, is partly the cause; and that when practitioners adopt more decided efforts we shall see a great improvement in this respect, for pneumonia, when fatal in infancy, very rarely is found to have advanced beyond the stage of hepatisation, whereas the reverse of this is generally observed in adults.—*Dr. J. F. Duncan, Dublin Journal.*

DISEASE DISCOVERABLE IN INSANITY.

DR. PARCHAPPE, of the Rouen Asylum, says, that there is no cerebral disease which can be regarded as the essential lesion of insanity; but the following are those most frequently found:—Ecchymosis under the arachnoid and pointed injection of a part of the cortical surface, with or without softening; extensive softening of the middle portion of the cortical substance; adherence of the pia mater to the brain; rosy, lilac, or purple colour of the cortical substance; atrophy of the convolutions; induration of the brain.—*Acad. of Sciences*, Oct. 3.

BIRMINGHAM MEDICAL SCHOOL.

THE friends of this institution assembled in the lecture-room on Monday week, to witness the annual distribution of prizes to the students, Dr. Johnstone in the chair. Previous to the distribution Dr. Eccles delivered an address "On Design in the Human Body." At the close thereof the sixth Jephsonian prize of 21*l.* was given to Mr. G. Yates, of Dumbleton, resident student of the hospital, for the public examination which he had passed in medical knowledge, good conduct, etcetera. Dr. Johnstone, in conclusion, referred to certain efforts which were being made to establish a collegiate institution in connection with the Royal School of Medicine, in which the students were to enjoy "a home and parental, moral, and religious superintendence." Five silver medals were then distributed, two of gold (subscribers), value five guineas each, the latter to Mr. Moore, Moreton-in-Marsh, and Mr. Chambers, Wolverhampton, for "diligence, regularity, and good conduct, ascertained by an examination of the class books of each lecturer."

INJECTIONS INTO SEROUS CAVITIES.

FOR some time M. Velpeau has devoted his attention to injections into serous cavities. Making a small puncture into the cavity, and injecting a solution of iodine, he has effected a cure in cases of serous cysts, sanguineous cysts, and colloid cysts, in almost every region of the body. Bronchocele often consists in cysts filled with a serous or dark fluid; in five cases of this kind the author tried the iodine injections, and was completely successful. He has recently employed a more simple mode in cases of hydrarthrosis, and hopes that it will be as easy to cure this disease as hydrocele, with iodine injections.

MR. GRAINGER'S "INTRODUCTORY" LECTURE.

To the Editor.—Sir, In your notice of my lecture last week it is stated that I was appointed to deliver the introductory lecture of the school. The fact is, that Mr. Green was requested to undertake that office; the lecture you have noticed being merely introductory to the anatomical course. I have the honour to be, Sir, your most obedient servant, R. D. GRAINGER.—Manchester-square, Oct. 20.

WESTMINSTER MEDICAL SOCIETY.

THE first meeting for the session will be held this evening (Saturday) at Exeter Hall. A paper is announced to be read from the pen of Dr. Golding Bird.

ROYAL COLLEGE OF SURGEONS IN LONDON.

LIST of gentlemen admitted members on Friday, October 14, 1842, T. Peat, J. Moore, H. D. Scholfield, J. Rhodes, W. Boyd, C. D. Telfair, J. L. Vickerman, J. I. Acheson, J. M. Best.

BOOKS RECEIVED.

The Anatomy of the Arteries. By Richard Quain. Part XIII., Five Plates. Delineations by Joseph Maclise. London: Taylor and Walton. 1842.

The Cyclopædia of Practical Receipts in all the Useful and Domestic Arts; being a Compendious Book of Reference for the Manufacturer, the Tradesman, and the Amateur. By a Practical Chemist. London: J. Churchill. 1842. Pp. 281.

CORRESPONDENTS.

THE UNQUALIFIED PRACTITIONER IN WORCESTERSHIRE.—A correspondent at Dudley, referring to the "Contribution to Medical Reform," which appeared in THE LANCET of Sept. 17th, informs us that, "in consequence of the conduct of Mr. Richard Lloyd, whose name and handbill have been handed down to posterity by THE LANCET, a communication was forwarded by seven practitioners of Dudley to the Apothecaries' Company, on the 17th of May, enclosing the handbill, and a narration of certain circumstances connected with him, the inferences from which were, that he had never received a medical education,—that he was not in practice prior to August, 1815,—that he unwarrantably usurps the title of M.R.C.S., and that he is not connected with any legally qualified practitioner. The company in a few days enclosed a list of queries to which replies were forwarded, but no further notice was taken of this communication until the 26th of August, when a letter came from the clerk to the society in answer to a letter dated the 28th of July, stating that he had not received instructions from the society as to the course which they would feel it their duty to adopt in the case." Our correspondent intimates that the memorialists feel that their application has been met by very unjustifiable apathy and slothfulness on the part of the society, and strongly condemns this apparent neglect of the interests of the licentiates of the company. He adds, that "the name" and "reputation" of the non-qualified party are well known at Sheffield, Chesterfield, Nuneaton, and Hanley Potteries, in each of which places he has undertaken the duties of a regular practitioner of medicine.

ST. GEORGE'S HOSPITAL.—A correspondent says, "With the hope of stopping the advertising of that which is never *meant* to be performed, allow me to bear out your correspondent of last week relative to St. George's Hospital. In addition to advertising in that school Mr. *James* Johnson as a demonstrator, whereas he did not demonstrate *at all* last session, and scarcely at all in the session before, Mr. Macaulay was advertised as a lecturer on medical jurisprudence, although he had left England long before the course commenced; and Drs. Macleod and Nairne, and Mr. Babington and Mr. Walker were advertised as lecturers on *clinical* medicine and surgery, although not one of them gave a single clinical lecture during the session, the only real clinical lecturers being Sir Benjamin Brodie and Dr. Seymour during the winter, and Mr. Cæsar Hawkins during the summer."

Mr. P. Jones.—It is not customary with us to give medical advice without seeing the patient, who, in the present instance, may obtain it from any respectable practitioner in his neighbourhood, on ten minutes' consultation.

To *Medicus Juvenis* we must give the same reply, if his own common sense and reflection do not suggest to him the proper course to adopt.

F. J., Wigan, will find the information he asks in the students' number of THE LANCET of October 1st. If any queries not explained in that number should occur to him, we shall feel pleasure in replying to them.

X.—In speaking of the success of the school, our correspondent does not lay sufficient stress on the active benevolence, the inflexible uprightness of conduct, and indomitable zeal of the monarch of Guy's, King Harrison.

A Constant Reader inquires the formula of the saffron ointment mentioned in Cooper's Dictionary as having been used in the practice of Baron Larrey. Our correspondent should address himself to the author.

An Old Pupil of St. Thomas's should send us a few "cases" treated by the party in question. His present note is only a denunciation, for which half a dozen facts would be a desirable substitute; or a history of the career, the probable amount of experience, and the intrigue of appointment may be given. His communication must be authenticated, confidentially.

A Constant Reader.—We did not object to the remarks being anonymous, but considering that the reform could be effected as well by a communication to the authorities as by a public notice, the latter, moreover, being an injudicious proceeding (for the allegations were of a horrifying character), we offered the suggestion in question, and shall now act upon the proposition.

If *T. W. S.* cannot consult with benefit a respectable surgeon whom he may personally visit, he may rely upon it that no good will accrue from any self-doctoring founded upon epistolary or printed prescriptions. We have no specific to offer, and upon a rational mode of treatment only can he successfully rely. Probably he has not conferred with a reputable practitioner.

The communications of *Mr. George Moore*, *Mr. Mackinder*, *Mr. Hopgood*, and many other correspondents will be inserted in an early number.

A Guy's Pupil.—"With whom did Mr. Paget, of St. Bartholomew's Hospital, serve his apprenticeship?" We cannot answer this question.

The Cases and Observations upon Paralysis, symptomatic of Derangement of the Ganglionic System, by *Dr. Watts*, will receive early insertion.